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ABSTRACT

This study describes and evaluates a project designed to increase the low reading ability which interferes with the academic growth of the targeted kindergarten, second-, and fifth-grade classes in a suburban Chicago (Illinois) community. The problem of low reading ability is documented through data revealing the number of students who received low scores on criterion referenced tests, basal reading unit tests, and the Iowa Tests of Basic Skills. Analysis of probable cause data reveals that students' lack of reading abilities were related to societal and educational program issues. Many of these probable causes were identified by parent survey, student interviews, teacher observations, school report cards, and anecdotal records. A review of solution strategies combined with site-based opportunities for the use of technology suggests the use of hypermedia technology in kindergarten, second-, and fifth-grade classrooms. Post intervention data indicate an increase in students' comprehension, study skills, decoding, and vocabulary. (Contains 18 references and 13 figures of data. Appendixes present data, survey instruments, a description of hypermedia programs, examples of parent comments and student packets, a list of literary genres, and an example of student quizzes.) (Author/RS)

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IMPROVING STUDENTS' READING SKILLS THROUGH THE USE OF TECHNOLOGY

by

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Saint Xavier University & IRI/Skylight

Field-Based Master's Program

Action Research Project
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Abstract

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Date: April 23, 1996

Title: Improving Reading Abilities

The objective of this project was to increase the low reading ability which interferes with the academic growth of the targeted kindergarten, second, and fifth grade classes in a suburban community. The problem of low reading ability was documented through data revealing the number of students who received low scores on the Brigance, District #59 reading CRT's, Publishers unit tests from the HBJ reading series, and the IOWA test of basic skills.

Analysis of probable causes revealed that student's lack of reading abilities were related to societal and educational program issues. Many of these probable causes were identified by parent survey, student interviews, teacher observations, school report cards, and anecdotal records.

A review of solution strategies suggested by knowledgeable others, and site based opportunities for use of technology, suggested the use of hyperstudio interventions in kindergarten, second, and fifth grade classrooms.

Post intervention data indicated an increase in students' comprehension, study skills, decoding, and vocabulary.

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Chapter 1

STATEMENT OF PROBLEM AND DESCRIPTION OF CONTEXT

Problem Statement

The students of the targeted kindergarten, second, and fifth grade classes in this suburban community exhibit low reading and comprehension skills which interfere with their academic growth. Evidence for the existence of the problem includes Reading Criteria Reference Test (CRT); 2-5, as well as, scores from the Illinois Goal Assessment Program (IGAP), and teacher observation in multiple subject areas.

Description of Immediate Problem Setting

There were two schools that participated in this research. They will be referred to as school A and school B. School A is a suburban K-5 elementary school located northwest of Chicago, Illinois consisting of 367 students. This elementary school has a large bilingual population. The student population is 43.6 percent White, 41.7 percent Hispanic, 7.4 percent Black 7.4 percent Asian/Pacific Islander, and 0.0 percent Native American. (Due to rounding, the total for the student population may not equal 100 percent). Thirty-one and three tenths percent of the students are low income students with 26.7% of the students being limited English proficient. Limited English Proficient (LEP) students are those who have been tested and found eligible for bilingual education. Low income students are pupils from families receiving public aid or being supported in foster home with public funds or eligible to receive free or reduced-price lunches. The attendance rate at this school is 94.9 percent. The student mobility is 37.4 percent. There are no chronic truants.

The staff of this school includes: one principal, one half-time assistant principal, eighteen kindergarten through fifth grade teachers, seven of those being bilingual teachers, one special education teacher with an assistant, two part-time physical education teachers, one Chapter I reading specialist with an assistant, one teacher who's role is that of a half-time reading clinician and half-time talented-gifted teacher, one library media center teacher and four assistants, one primary resource teacher, one part-time social worker, one part-time speech therapist, one part-time psychologist, one part-time art instructor and one music teacher. Auxiliary personnel include the following: one full-time secretary and two assistant secretaries, one of which helps assist the bilingual population, one full-time health clerk, and three custodians.

The Chapter I Reading specialist services thirty-nine students, along with extended day kindergarten program. The extended day kindergarten program consists of fifteen children who have been identified as at-risk.

The special education resource person services thirty-two children daily. Eight of those children have met the formal criterion through testing for placement in this program. The speech therapist has a case load of twenty students.

School Site B

School B is a suburban Pre-K-5 elementary school located northwest of Chicago, Illinois consisting of 464 students. The student population is 91.4 percent White, 4.3 percent Asian/Pacific Islander, 2.4 percent Black, 1.9 percent Hispanic, and 0.0 percent Native American. One and seven tenths percent of the students are low income students with zero percent of the students being limited English proficient. Limited English proficient students are those who have been tested and found eligible for Bilingual Education. Low income students are pupils from families receiving public aid or being supported in foster home with public funds or eligible to receive free or reduced-price lunches. The attendance rate at this school is 96.0 percent. The student mobility is 7.9 percent. There are no chronic truants.

The staff of this school includes one principal, twenty-one pre-kindergarten through fifth grade teachers, one full-time special education teacher, one-reading support teacher, one talented-gifted teacher, one full-time physical education teacher, one library media center teacher and three assistants, one part-time social worker, one part-time speech therapist, one part-time psychologist, one part-time art instructor and one music teacher. Auxiliary personnel include the following: one full-time secretary and one assistant secretary, one full-time health clerk, and three custodians.

The special education resource person services thirty children daily. The speech therapist has a case load of twenty-three students.

Description of Surrounding Community

The elementary schools A and B are a part of a consolidated school district located in north-west Cook County in Illinois. The schools in our district are located in several cities. The district employs 668 people of which 423 are certified teachers.

Approximately 56 percent of the teachers have advanced degrees. The class sizes for the current school year is 23.1. The district owns and operates thirteen schools which include 10 elementary schools and 3 junior high schools. Current student enrollment is 6,070.

The occupational composition of the district's population shows a total of 36 percent in the upper two categories of the U.S. Census, 1990 (i.e. professional/technical, and management/ administration) with 64 percent of the work force concentrated in the remaining categories. According to the 1990 census, the average family income is $48,863. The average per capita income is $19,262. The communities population is 91.7 percent White, 6.9 percent Asian/Pacific Islander, 3.6 percent Hispanic, 0.6 percent Black, 0.1 percent American Indian. As reflected by the 1990 census, 28.6 percent of the adults are high school graduates and 26.5 percent are college graduates.

The superintendents salary is $109,000. The average administrator salary is $76,868, and the average teacher salary is $44,931. Forty point 9 percent of the teachers in the district have a bachelors degree, 59.1% have a masters degree. The per pupil expenditure per year is $6,997.95.

The 1990 census of the school community work force reflected a total of 19,167 employed individuals of the total population of 33,429; 2.5 percent unemployed, 31.6 percent managerial-professional, 6.4 percent service occupations.

In 1990, there was a 70.5 percent increase in single family housing. Of the available housing 76.6 percent is owner occupied and 23.4 percent is renter occupied (U.S. Census, 1990).

Regional and National Context of the Problem

The low reading skills of elementary students interfere with academic growth. The problem is not only seen in the community described but is a problem that has been addressed on a national level in the research. See Appendix A for the National Distribution.

A major problem confronting educators is the decline in the acquisition of literacy after fourth grade. This is seen as an accumulative effect from kindergarten to fourth grade. Whereas the National Assessment shows an increase in the late 1970's in reading achievement in grades 1-4, reading achievement in the higher grades has either not improved or has clearly declined (Chall Testimony, 1979). The decline in reading skills becomes more evident as the children are tested yearly.

As they progress through the grades students reading abilities do not continue to improve.

Over the past 15 years, verbal abilities of college entrants has also declined as measured by the Scholastic Aptitude Test (Wirtz, 1977). Mary Berry, Assistant Secretary for Education, summarized the findings in 1977, "Our research tells us that 9-year-olds are reading better than ever. But after that point at about fourth or fifth grade we see test scores begin to drop".

This drop constitutes a major problem for society as a whole, since it results in upper elementary and high school students who cannot read well enough to succeed in learning the content presented in social studies, science, career education and the like. High school graduates who read at a fifth grade level are not equipped to hold the white collar jobs which constitute an increasing proportion of employment opportunities.

Furthermore, the difference in reading and related school achievement between children of high income and low income families becomes even greater beginning with the fourth grade than it was in the primary grades. Thus, the children of low income families are especially vulnerable to academic failure beginning with the middle and upper elementary grades and continuing through high school and college. Confirming data on the significant decline with increasing age among low income children is found in such standard works as (Coleman et.al., 1966), when comparisons are made with middle and high income children or with national norms (Chall, 1979). Another indication of the decline was seen in the results of the 1994 Illinois Goal Assessment Program at the local level. The percent not meeting the reading goals at the third grade level was ten percent. However, as the grade levels increased this percentage grew. Sixth grade had fourteen percent of the children not meeting the reading goals, and in eighth grade this percentage had increased to twenty-two percent. See Appendix B for an example of the reading IGAP scores for the state, district and School sites A and B.

How children acquire language differs substantially from how they are expected to formally learn reading skills in school. Instructional methods often rely on imitation and reinforcement rather than viewing reading as language and thinking. How language is learned and how reading skills are taught in schools are at odds with each other (Tovey, 1986). The reading skills necessary for a student to use in speaking or listening, is transferred from their knowledge to the reading task. When the sentences in the passage of reading material reflect the child's normal speech patterns, then his reading comprehension is higher. This implies that before the students can read passages with complete understanding they must be able to use the basic sentence structure of phrases and clauses in their oral language. Meaning is the key idea. This can be very different from the instruction given in a classroom. This difference can effect students reading abilities.

Research of the national problem indicates a need for interventions to help increase reading abilities of children. Students need to be motivated and inspired to want to learn to read, while understanding the importance of reading as a life skill. This is closely related to what is seen on a local level.

Chapter 2

PROBLEM EVIDENCE AND PROBABLE CAUSE

Problem Evidence

The following three tests were used as evidence to document low reading ability among the students. In kindergarten, the Brigance Screen was used in combination with the District Kindergarten DiagnosticTest. Results from the previous years Criterion Reference Test along with the publishers unit tests from the Harcourt Brace Janovich Reading Series were used in the second and fifth grade classes.

The targeted kindergarten class of School A was given the Brigance Kindergarten and First Grade Screen. The test showed that the children had a range of abilities from 83.5 to 99.5 out of a possible score of 100. The test covered areas that included personal data response, color recognition, picture vocabulary, visual discrimination, visual-motor skills, gross-motor skills, rote counting, identifing body parts, verbal direction, numeral comprehension, printing, and syntax and fluency.

The second test given to the targeted kindergarten class was the districts' Kindergarten Diagnostic Test. This test was more academic in nature. The areas that were covered on this test were recognition of lowercase letters and upper case letters, draw-a-person, shape recognition, and numerals out of order. The variance in ranges were 16 to 77 out of a possible score of 78. The researchers feel that although the scores on the Brigance were not that varied, when the children were tested in more academic areas there was a much wider range of abilities. This wide range of abilities seen upon entering kindergarten were due to a variety of factors that influenced these scores, such as two language homes, pre-school experiences, literacy of parents, and mobility of the family. The two test scores were combined. From this the researchers selected six children from the low average range. The researchers felt that these children had potential for growth during the intervention.

The targeted second grade class of school A was given the Criterion Reference Test (CRT); 2-5, at the end of 94-95 school year. The scores showed an ability range of 102-143 out of a possible score of 150. The test covered areas of decoding, contractions, vocabulary, comprehension, general areas of study skills and general areas of literature based on the first grade reading series Hartcourt Brace Janovich (HBJ). After review of the test results the researchers found that the decoding scores were higher than the comprehension scores. These results might indicate that there was a stronger emphasis on phonics than comprehension in the first grade classrooms. There may also have been a lack of parental involvement in their reading experiences due to lack of parental literacy skills. The six students that the researchers selected were chosen because the researchers felt that they would benefit from the selected intervention.

The targeted fifth grade class in school B was given the Criterion Reference Test (CRT); 2-5, at the end of 94-95 school year. The Criterion Reference Test covered areas of decoding, vocabulary, comprehension, study skills, and literature based on the fourth grade reading series Hartcourt Brace Janovich (HBJ). Although this test may not show a complete picture of the students' reading abilities, the results allow the researchers to identify the students' reading skills.

The researchers selection of the six children was based on the results of the Criterion Reference Test (CRT); 2-5, and their 94-95 school report card. First, the researchers reviewed the test results and identified any students' scores that "did not meet" or "did meet" the passing requirements. Many of these students "did not meet" the requirements in the area of decoding or vocabulary. However, most of the students barely met the requirements for comprehension and study skills. Lastly, the majority of the group met or exceeded the test requirements in the general area of literature. Next, the researchers reviewed the selected students' 94-95 report cards. The teacher indicated several times throughout the grading periods that the students needed improvement with comprehension, skills and vocabulary. Therefore, the six students the researchers selected would benefit by receiving some reading intervention.

The parents of the targeted groups were asked to complete a survey. This survey asked questions pertaining to parental attitudes and feelings about reading, as well as how and if they used reading to interact with their children. The results were very positive. See Figure 1-7. Examples of surveys can be found in Appendix C.

The majority of the children of the kindergarten class in the targeted school site A had pre-school experience, with most of the mother's working outside of the home. The response of the parents of the second grade class in school site A reflected that they felt the children needed to be read to. However, there was some indication that this could not be accomplished because of time constraints. The parents of the fifth grade targeted class in school site B were also asked to complete the same questionnaire about their children's reading experiences. It was noteworthy that the parents no longer felt that reading aloud to their children was necessary. Most parents enjoyed reading and read to their children.

However, these results may be somewhat influenced by parents wanting to tell the teacher what they would like to hear, instead of their true attitude.

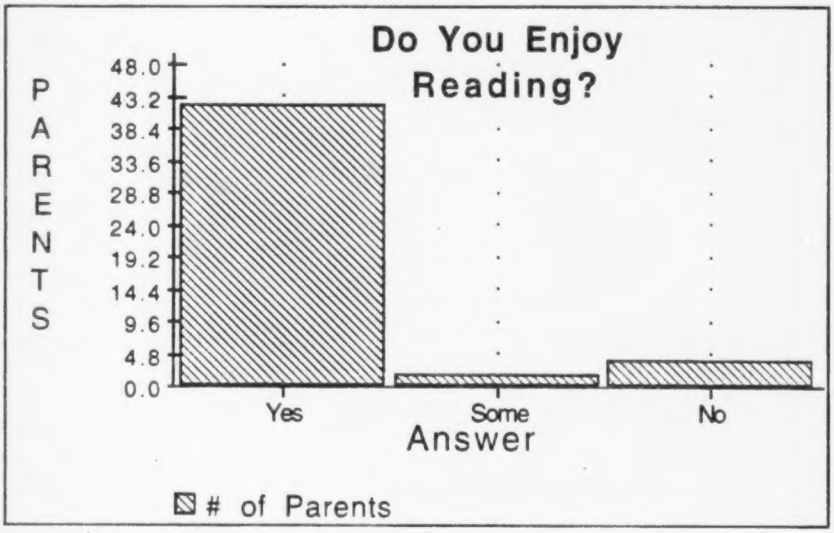

Figure 1 : Question Number One

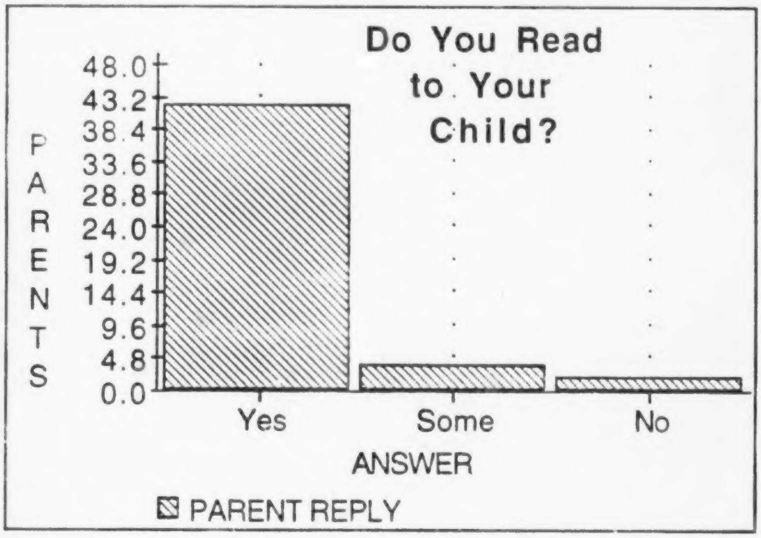

Figure 2 : Question Number Two

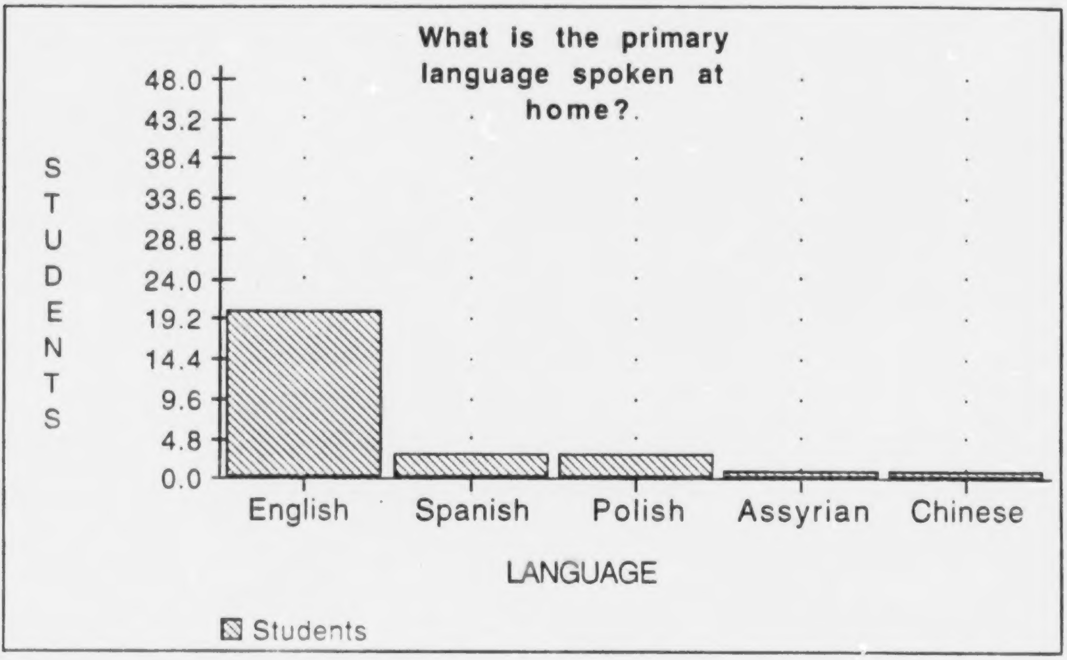

Figure 3 : Question Number Three

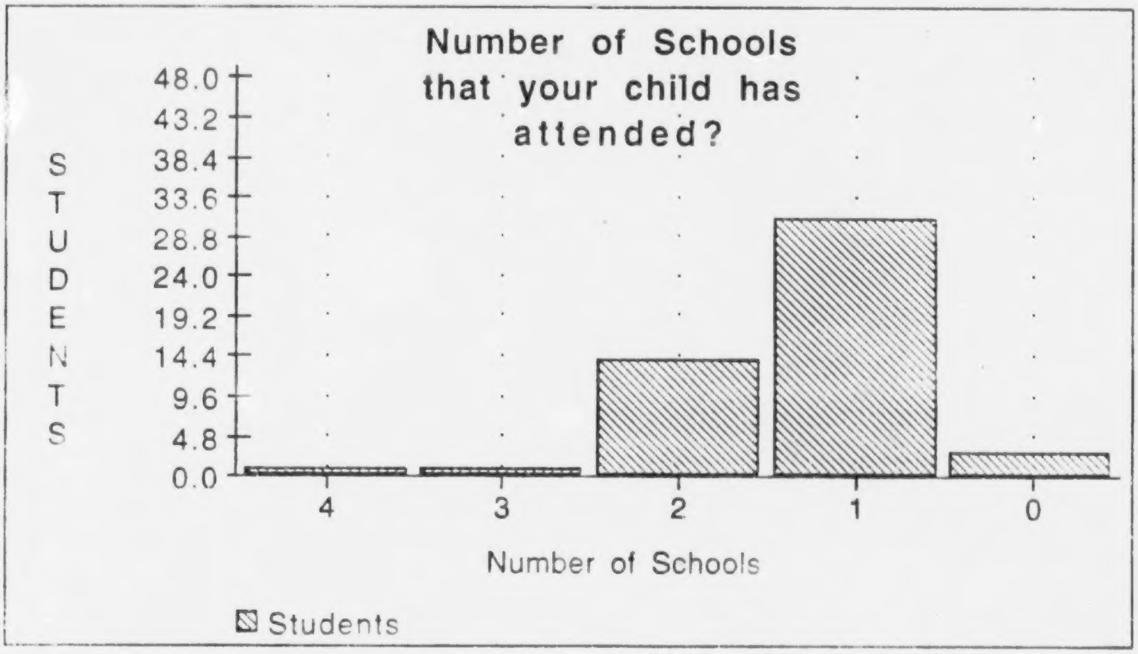

Figure 4 : Question Number Four

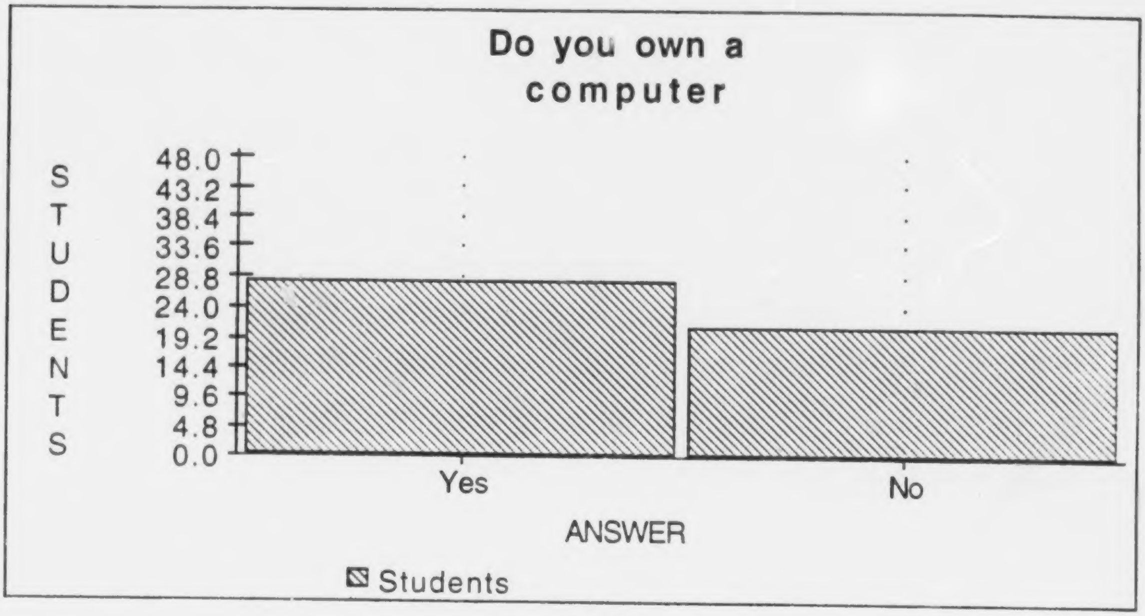

Figure 5 : Question Number Five

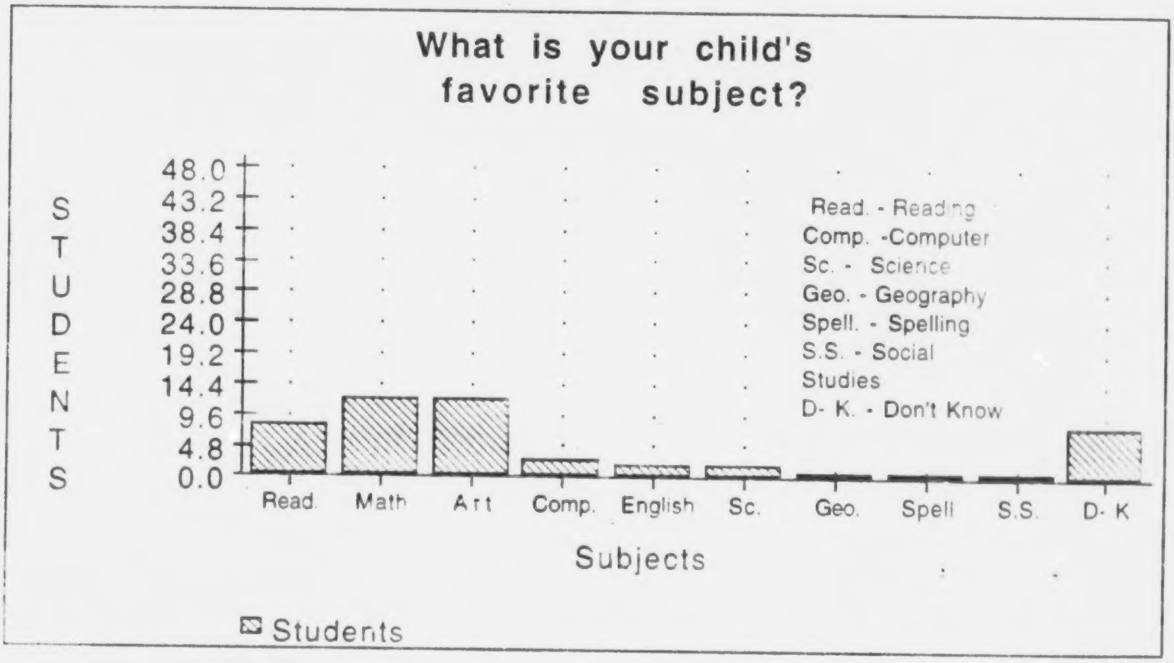

Figure 6 : Question Number Six

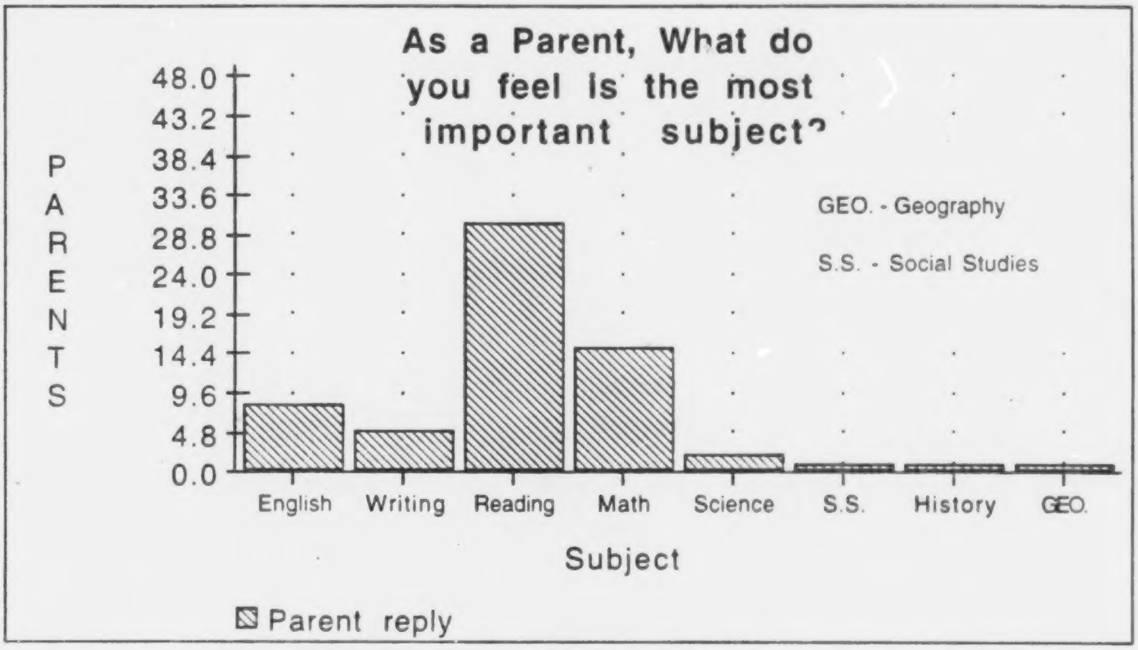

Figure 7 : **Question Number Seven**

For target school A and B the literacy experiences survey section of the Reading Assessment in the Illinois Goal Assessment Program was designed to find out about student' habits and attitudes toward reading and writing both in and out of school. Information from students across the state indicates that better readers stop and read again when they are confused by what they have read.

They also think about what they want to say before they write, and go back and rewrite when it does not make sense. In addition, better readers report that they more frequently share their writing with other students. The data are divided into response categories. The table below shows the percentage of students in your school who selected each response. The last column shows the number of students at the targeted schools A and B who responded to each question.

Probable Causes

In analyzing our problem data these action researchers found probable causes. The following chart; see Figure 8, lists probable causes for the problem. The areas marked in the literature based column indicate that these probable causes can be identified through literature. The areas marked in the site based column indicated that these probable causes can be identified at the specific site or school.

Literacy Experience Chart

Probable Causes	Literature based	Site based
-parent literacy level		X
-high mobility rate	X	X
-lack of literacy experiences	X	X
-overloaded curriculum	X	X
-low income	X	X
-oral language deficit	X	
-T.V. (too much)	X	
-video games	X	
-do not own books		X
-ESL	X	
-family structure	X	X

Figure 8 : Literacy Experience Chart

The enrollment of children from two-language homes in target school A has grown from 9 percent in 1980 to 50 percent in 1994. The district percentage is 16, and the state percentage is 11. Additionally, target school A also has a 26.7 percent population of Limited English Proficient children (LEP). The district percentage is 9.6 and the state percentage is 5.2. These percentages are from the 1994 School State Report Card. In target school B the Hispanic population has increased from 1 percent in 1980 to 12 percent in 1994. This indicates a large group of bilingual students within the general school population. When different languages are spoken at home than in school children's literacy skills are effected.

Literature suggests several reasons for low reading and comprehension skills which interfere with academic growth. According to Purcell-Gates and Dahl (1991) literacy problems account for much of the difficulties of at risk-learners. For many of these students, problems with reading and writing are evident from the beginning of elementary school. Students may have problems because they lack essential background knowledge in content areas; fail to activate the background knowledge they do possess; and have limited vocabularies and problems understanding abstract concepts (Palincsar, David, Winn, & Stevens, 1991 as cited in Rich and Blake, 1994).

The local community has experienced a change in sociocultural growth in recent years. The institution of family is undergoing radical transformation. Families today are more diverse, heterogeneous, and unstable than in previous decades. Some of these trends are: single parent families, high divorce rate, economic issues and maternal employment (The Education Digest, 1995). The bilingual population within the school district has grown and now makes up a large percentage of the student body.

According to Schmidt (1995) because bilingual ethnic minority children have home cultures different from the school culture, they may not understand social interactions within the classroom culture. Consequently, cultural conflict often occurs and literacy learning may be adversely affected (Trueba, Jacobs, & Kirton, 1990).

Additionally, the moment they begin to read and write in school, the cultures of their homes affect their success or failure (Clay,1971; Reyhner & Garcia:1989; Swain, 1988: Verhoeven,1987).

Their struggles are believed to occur because they function within at least two cultures, at home and school, as they develop their literacy (Cummins,1986).

Some researchers have developed their own theories as to why there are poor readers. They may not have been read to at home and thus have not had good models for fluent reading; they have fewer opportunities to read in context; the materials they read are too difficult for them (Allington,1983a; Nathan & Stanovich,1991). Strong evidence that parental involvement can make a significant difference to children's achievements in reading. Furthermore, it can bring about positive changes to children's and parent's attitudes towards reading (Topping & Wolfendale,1985 as cited in Wray,1992). Students who come from homes where parent literacy skills are minimal, and who have limited experiences may have much more difficultly learning to read.

According to Stanovich (1986) children who engage in playful reading and writing opportunities are likely to come to school with some basic understandings of literacy and are eager to learn more, while those who do not, may not. Epstein writes, "The evidence is clear that parental encouragement activities and interest at home, and parental participation in schools and classrooms positively influence achievement even after the students abilities and family socioeconomic status are taken into account" (Epstein,1986). Furthermore, teaching reading in the 1990s is more difficult than ever. The burden to educate the nations children has shifted more than ever to the schools, and reading, as a student pursuit, must compete with sophisticated, seductive television programs, and computer programs. Teachers must use persuasive methods to draw students away from easy pursuits into the pleasures of reading (Avery & Avery, 1994). According to U.S Secretary of Education Richard W. Riley, concluded, "Too many students are spending too little time reading and too much time watching mind-numbing television. We need to emphasize basic reading skills while building on fundamentals to enhance comprehension and critical and analytical skills." This is based on the findings of the results of the NAEP Reading Report Card (American School Board Journal,1995).

The State of Illinois mandates time allocations for specific academic subjects in grade levels one through five. See Figure 9.

Meeting these time allocations proves to be difficult for the classroom teacher due to overloaded curriculum. Where do they find additional time within the school day to extend and enrich reading activities? Currently, education is focusing on integrating subject areas to relieve the time constraint problem, along with making learning more meaningful.

Suggested Time Allocations - Grade 1 - 5

Average time allotment in minutes per week for a typical student, by subject, for grades 1-5.

Time Categories	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Reading	400-450	400-450	350-425	350-425	350-400
Lang. Arts: English (1)	150	150	175 200	175 200	175 200
Handwriting	75	75	75	45	45
Spelling	90 (2)	90	90	90	90
Math	250	250	250	250	250
Science, Health, and Social Science (4)	175	175	225	225	300
Music	60	60	60	60	60
Art	60	60	60	40-60	40-60
P.E./ Recess	150	150	135	135	135
School housekeeping procedures (3)	220 115	220 115	180 55	180 35	180 35
TOTALS	1.575	1.575	1.575	1.575	1.575

Figure 9 : The Suggested Time Allocations for Grades 1-5

Chapter 3

THE SOLUTION STRATEGY

Review of the Literature

Just as there are a variety of causes for students to have low reading abilities, the research provides an array of solutions from which to choose. These action researchers will explore solutions to the causes inherent in the school setting. The following themes will be examined: literacy lesson framework, examining school literacy philosophy, using visual imagery strategy intervention, the use of cooperative learning strategies to motivate student reading, parent involvement, and uses of technology to improve reading.

First of all, children who are poor readers may benefit from a structured reading approach. According to Tancock (1994), a literacy lesson framework provides learning opportunities for children. The literacy lesson framework is shown in Figure 10.

The literacy lesson framework

1. Familiar reading (fluency)—approximately 5 minutes
2. Guided reading—approximately 30 minutes
   - Before-reading activity (generating prereading questions, introducing the book, or making predictions)
   - During-reading activity (teaching for strategy use, Directed Reading-Thinking Activity)
   - Postreading activity (answering prereading questions; evaluating predictions; or clarifying, extending, or refining thinking about the story)
3. Writing (shared writing and cut-up sentences, process writing)—approximately 15 minutes
4. Word sorting—approximately 5 minutes
5. Book sharing—approximately 5 minutes

Figure 10 : The Literacy Lesson Framework

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"The lesson framework we use combines productive instructional components for the children we tutor. Most important, the framework enables tutors to see and implement the links between current reading theory and practice" (1994). This lesson framework provides children with strategies to enhance their reading and writing.

The theory of school literacy is another method to help children learn to read. School literacy means that children need to know how to learn. Greenspan and Lodish (1991) state that school literacy comprises four elements: attending and focusing, establishing positive relationships, communicating, and being able to observe and monitor oneself. "To be productive, the educational experience must integrate the basics of school literacy into the day - to - day effort to teach verbal and numerical literacy". Examining each child's unique way of learning, and being cognizant of how early learning processes are being formulated is essential for reading progress.

Another approach to improve low reading scores, is the use of pictures to enhance recall. According to Rich and Blake (1994), this strategy helps children create a series of pictures in their mind to help them remember specific items. The use of these picture images can help the students enhance comprehension and learning. Students are taught a series of strategies one of which includes representing main ideas of text by drawing pictures. As cited by Rich and Blake (1994), a recent article described the successful use of pictures - referred to as "talking drawings" - with adult and primary school learners to enhance comprehension and learning (McConnell, 1993). This method of enhancing reading skills is beneficial for a variety of reasons. Primary children express themselves more easily using pictures rather than words. The use of picture drawing provides another alternative for all students who are visual learners.

A recent popular innovation in education has been the introduction of cooperative learning in classrooms across the country. As cited by Avery and Avery (1994), cooperative reading assignments promoted interest in reading and understanding of literature because cooperative learning increases processing". Processing can include many activities such as: speaking and listening to other students' ideas, summarizing and analyzing characters and events, connecting situations, and defending and challenging interpretations. Cooperative learning can also be fun and motivating for students. Cooperative learning strategies can make reading more meaningful for students by using activities that encourages their active involvement.

The literature suggests that parental support and encouragement at home are important to school aged children. Epstein (1985), writes, "The evidence is clear that parental encouragement, activities and interest at home, and parental participation in schools and classrooms positively influence achievement". An important goal for reading success in schools is to cultivate parents as partners in their children's education. Parents who take an interest in their children's reading motivate their children's desire to read.

There are good reasons for using the computer to assist reading, just as there are conceptual and methodological issues related to how best to do this (Reinking & Bridwell - Bowles, 1991 as cited by Leong, 1995). One main reason for using computers is that reading is a real-time language activity involving all types of available linguistic information (Bierwisch, 1983 as cited by Leong, 1995). According to Bortnick,

> " Hypermedia learning environments provide teachers and students with the power to manipulate and control richer learning activities than ever imagined before. Students, in particular, are offered opportunities to explore, convey, and create knowledge as never before using an array of educational technologies that, when combined, have the power of the computer, the resources of large databases, and the audio and visual impact of television. With hypermedia, we are able to visit any place on earth, at any time in history. We can hear about it, see it, manipulate it. Moreover, we can explore these situations from a myriad of perspectives and learning paths responsive to our individual interests, purposes, knowledge, and whim" (Bortnick,1995).

The earliest writers, kindergartners and first graders, use language to tell stories and illustrate them - wanting to communicate their own experiences and ideas. When writing or listening to a story, or working on projects using paint or graphics programs, children are also using spelling and vocabulary functionally. And as children use words, they begin to read.

Children write freely on the word processor. Some researchers find that children's word processing is more like speech than writing, and children choose to spend more time on language acquisition in classrooms with a word processor. When children are motivated by technology, learning is fun and students become actively involved in the learning process. The opportunity to develop language skills occurs when listening, reading, speaking, and writing skills are combined in real tasks. Language arts projects, such as having students use computers to develop a newspaper to be shared with parents and other students, can dramatically improve language mechanics while, at the same time, enhancing attitudes toward writing and other language skills.

But there is an important difference between books and computers. While the content of a book is static and unchanging, a computer's content is fluid and evanescent. Thus, a book can be written at one time and place and read in another, carrying communication through ages and across the continents. Once printed, however, a book's content remains fixed (Thomas, 1994).

For some students, computerized prescriptions will seem more credible, more scientific, than teacher or reading specialist recommendations. Computer and interactive video programs which allow students to make many choices as they wind their way through a story can supply more multiple endings than can printed books. Interactive video encourages interest in current titles, introduces a new medium for fiction, polishes note-taking skills, and increases reading comprehension. More importantly, reading becomes associated with fun activities (Averly & Averly, 1993)

Studies using videodisc technology, in particular, report that learning occurs comparatively more rapidly and better in this type of interactive environment than in the traditional one (Henderson, 1988, Hofmeister, Lubke, Peterson, 1988; Hughes, 1989; Johnson, 1990; Kirchner, 1988; Leonnard, 1989; Pollack, 1990; Straker, 1988 as cited in Bortnick, 1995). The work of Malone and Lepper (1988) is illustrative of research that clearly suggests that hypermedia can impact human motivation, too.

Elsewhere, Block and King (1987) have called attention to intrinsic dimensions of instruction that have gone largely unexplained as being factors critical to students achievement. Most importantly is the opportunity to learn without any external rewards, but just for fun (Bortnick, 1995).

One of the best reasons for choosing technology for improving reading would be the many factors that interact and affect reading achievement. The role of the teacher is to build and enhance positive attitudes toward reading so that children will want to read and will continue to want to read (Kolker, 1977). Technology provides us with a tool to do this.

The use of technology provides the students with the skills that they will need in the real world. The world we live in is rapidly changing. We have, in a relatively short span of time, moved from an industrial society to an information society. Our schools are challenged on a daily basis to keep up with an ever-increasing technologically based society (Wilson, 1992). Educational leaders, in preparation for tomorrow's society, want and need to guide instructors and to teach students to be effective users of technology. The wonders of multimedia capabilities enable us today to produce innovative information delivery systems. A confluence of technologies requires an integration of educational technologies and curricula to meet educational challenges (Wilson, 1992).

The ability to use technology enhances the spectrum of the children's developmental levels. Students with emotional disabilities are benefitting from the consistency and structure that technology provides. They appreciate the control that the computer allows them and they quickly learn computers don't react to such things as temper tantrums. We do not allow computers to be used only for reward time, nor for purely drill and practice sessions. Software selection is critical to the implementation process; therefore, we continually update and revise software lists to match instructional objectives and reflect new innovations (O'Neal, 1992).

Project Outcomes and Solutions Components

How will we motivate the children to improve their reading when there are constantly bombarded with television and video games? The solution that we have chosen is using multimedia computer programs to inspire the children to read. Such an approach includes technology solution components discovered in the literature review. Therefore the following action plan will be implemented:

> As a result of using hypermedia technology during the period of October 1995 through April 1996, the kindergarten, second, and fifth graders will improve reading skills as measured by teacher observation, journals and standardized tests.

In order for the terminal objective to be accomplished, the following process objectives are necessary:

1. The students will have access to computers several times a week.
2. Hypermedia technology programs will be chosen to meet the needs of the children during intervention.
3. Students will use several different hypermedia programs during this intervention.
4. Technology will be utilized in all stages of the reading process.
5. The classroom enviroment will motivate the children to read.

6. Cooperative learning will be used in conjunction with technology.

Action Plan

While reviewing the literature, it became evident that the use of hypermedia is a key strategy to enhance reading skills. In order to develop these skills interactive hypermedia programs are essential for success. Hypermedia provides children with opportunities to use a variety of modalities, such as visual, auditory, and kinesthetic to learn. The content of hypermedia programs is very motivating for students.

Action Plan Outline

I. Research and preview hypermedia reading programs.
  A. District Instructional Resource Center (IRC).
    a. Select Programs - lasers, videos, and CD Roms.

- B. Software City
    - a. Preview catalog
    - b. Talk to Representatives

- C. Interview Associate Superintendent Dr. Bortnick
    - a. List New Programs
    - b. Receive Training
    - c. Inquire about Funded Sources
        - 1. Grant
        - 2. Business Partnerships

II. Analyze and interpret results from the standardized reading scores.

- A. Brigance
- B. Criterion Reference Test-District #59
- C. Unit Test - HBJ Reading Series
- D. Iowa Test of Basic Skills

III. Identify the skills that we want to address through hypermedia.

- A. Reading Comprehension
- B. Vocabulary
- C. Higher Order Thinking Skills
- D. Word Attack Skills
- E. Oral Fluency

IV. Select the hypermedia programs appropriate for the needed skills.

- A. Kindergarten
    - a. Reading/Singing Program
    - b. Borderbund CD Roms
- B. Second Grade
    - a. CD Roms
    - b. Interactive Laser Disks
- C. Fifth Grade
    - a. Word Attack
    - b. Storylords Video
    - c. Laser disks

V. Implement a plan to use hypermedia in the classroom.

- A. Select Target and Control Groups (Kindergarten only-flip-flop)
    - a. Look at Tests Scores
    - b. Group Heterogeneously
    - c. Make a Target Group
- B. Establish Cooperative Groups
    - a. Pairs/Triads
    - b. Share Ideas
    - c. Apply Skills

- C. Plan a Schedule-Time Line
    - a. Start/Finish Time
    - b. Establish Frequency of Lessons
    - c. Plan for Enrichment or Extensions

VI. Establish and apply an ongoing teacher observation journal.

- A. Comments on Progression
- B. Process
- C. Reflection on Daily Basis

VII. Evaluate student progress using standardized tests and teacher observation journals.

- A. Brigance
- B. Unit Test - HBJ Reading Series
- C. Results from Hypermedia Programs

Methods of Assessments

For the targeted classrooms the methods of assessments are as follows, daily log of ongoing progress and reflections of the children's feelings on the programs, and retesting of the six selected students in each of the targeted classrooms using the same pretests that were given prior to the intervention.

Solution Strategies

After a thorough technological and literature search, several solutions were identified. The solutions are described under various headings: selection of hypermedia programs, implementation of these programs, and ongoing assessment of the programs.

Implementation of Hypermedia Reading Programs

Six children from each of the classrooms were selected as our target group. Each classroom developed their own implementation schedule. The researchers decided to implement their plans for two full quarters November-March. The targeted kindergarten group of six children attended computer lab five days a week for a one-half hour period. They each had their own Macintosh computer two of which had CD-ROMS. Occasionally the children were paired to work on certain programs. The programs that they were to work with were assigned by the classroom teacher. The assignment schedule was recorded to maintain variety and consistency, a daily log was kept by the classroom teacher to assess ongoing progress.

The targeted second grade group of six children went to the learning center four days a week for a one-half hour period. During this time they were given the opportunity to go to the writing lab and work individually on a Macintosh computer; two of which had CD-ROMS. A program was chosen by the learning center teacher. The programs helped develop their reading and writing skills. This occurred two days a week. The other two days they stayed in the learning centerwhere they were given a whole class instructional lesson. The learning center teacher would direct the lesson around one of the programs from the teachers' computer work station. This would help the students become familiar with the program and then enable them to work individually in the lab on an extended activity or work individually on certain reading and writing skills. The assignment schedule was recorded to maintain variety and consistency, a daily log was kept by the classroom teacher to assess ongoing progress.

Although only six students will be evaluated for this intervention the whole class of the targeted fifth grade group would be exposed to the multimedia programs. The classroom teacher chose one-hour a day for five days a week for the reading intervention. There were four computers set-up in the room along with a teacher station which included a Macintosh computer, large screen monitor, a laser disc player, a lapis card, CD-ROM, and video disc player, and was used to implement whole group instruction using the selected programs over a two week period for each genre of literature. Six programs would be used. The assignment schedule was recorded to maintain variety and consistency, a daily log was kept by the classroom teacher to assess ongoing progress.

Solutions

1. Children must believe that they can learn to be good readers and writers (Tancock, 1994).

2. Children need good models for fluent reading (Tancock, 1994).

3. Students need many opportunities to read in context (Tancock, 1994).

4. Daily silent reading needs to be built into the curriculum (Tancock, 1994).

5. Reading focus is on meaning (Tancock, 1994).

6. Use of technology provides the power to manipulate and control rich reading environment (Bortnick, 1995).

7. Hypermedia learning environments meet the learning modalities; audio, visual, and movement (Bortnick, 1995).

8. Studies using video disk technology report that learning occurs comparatively more rapidly and better in this type of interactive environment than in the traditional one (Bortnick, 1995).

Chapter 4

PROJECT RESULTS

Historical Description of Intervention

As stated in the terminal objective, hypermedia technology was used during the period of October 1995 through March 1996 in the kindergarten, second, and fifth grade classrooms of the targeted schools. Hypermedia technology was used to implement an intervention that would improve reading skills. The results were measured by teacher observation, journals and standardized tests.

After an extensive review of the literature the action plan was implemented. The action researchers began this plan in the following order:

1. Hypermedia programs were researched and previewed.

The action researchers made the selection of these programs based on their students' reading abilities.

2. Results from standardized tests were analyzed and interpreted by the action researchers. Then the student's strengths and weaknesses were recorded on graphs.

This helped make a visual guide for the action researchers to use when they selected the appropriate programs.

3. The action researchers identified specific skills that their student's needed to improve based upon the standardized test scores.

4. The hypermedia programs were selected based upon the action researchers previewing in combination with the scores from the standardized tests.

A. Kindergarten
    a. Reading/Singing Program
    b. Borderbund CD Roms
    c. Kids Pix Studio
    d. Sticky Bear Reading
    e. Reader Rabbit's Reading Journey
    f. Baily's Book House
    g. A to Zap

B. Second Grade
    a. CD Roms
    b. Kids Works 2
    c. Apple Early Language Program
    d. Sticky Bear Reading
    e. Reader Rabbit's Reading Journey

C. Fifth Grade

a. Word Attack

b. Channel Read Laser Disk

c. Read and Roll

The researchers organized their students based upon the programs that were used. In kindergarten the students worked with the programs three times per week. They worked on programs individually, paired, or in a cooperative group structure. Whoie group instruction was used for introducing the use of CD Roms, i.e. Little Monster. In second grade, the students went to the lab two times per week. The programs were introduced to the students using whole group instruction. When the students were familiar with the programs they worked individually, paired, or in a cooperative group structure. The fifth grade students worked with the Channel Read Program four times per week. With the Channel Read program the students were instructed using whole group instruction. The remaining programs were available in the lab setting.

The programs selected by the researchers contained reading skills such as; vocabulary, comprehension, listening, writing, and viewing. The action researcher's monitored their student's progress daily. Adjustments of programs and scheduling were made according to the student's needs. Because of this the action researchers remained open and flexible in their approach. A complete description of the programs used for the intervention can be found in Appendix D.

Student motivation remained high throughout the intervention period. The action researchers carefully monitored this by keeping daily journals of the children's progress. Student comments and teacher observations were noted in these journals. At times, the action researchers allowed the students preference to act as a guide for the selection of a hypermedia program during the scheduled lab time. For example, when individual primary students began to prefer a program in which they could created their own stories rather than work on a program that would reinforce or teach a new skill, the students were allowed more time to work on them. The action researchers remained aware of their six students progress by referring to the students journals. Due to the variety of hypermedia programs available, the researchers were able to guide the students from one program to another when they felt it would benefit their student's progress. These strategies helped the students remain highly motivated during the intervention period.

Presentation and Analysis of Results

School Site A - Kindergarten

As the kindergarten action researcher began to observe the selected six students working on the computer programs they seemed somewhat cautious, afraid that they would break something. They were tentative about touching the keypad and the mouse. Some of the fundamentals of the programs were taught to the students such as the use of the mouse, however, discovery was another strategy the students used as they progressed. The children experimented using the computer programs. This approach let them discover for themselves many aspects of the programs they were working on. After their initial tentativeness wore off they were eager to go to the computer lab. They clapped their hands when the researcher announced it was computer time. Their excitement increased on a daily basis, success building upon success. As they became more confident in working with the programs they became more interested and involved. They asked, "When is our computer lab time? "This type of open-ended experience helped the children become more and more confident, using the computer as a learning tool.

There were basically two types of programs available for use within the computer lab; the programs in which they created words and pictures and the kind that reinforced skills. The reading skills computer programs included exposure and reinforcement of letters, sounds, and sight words. The students created pictures using the other programs. Then they wrote stories using "temporary spelling", which is a phonics skill, to create stories for their pictures. It was noted that when the students used the skills based programs, without directions from the action researcher, they selected letters and words that were emphasized in class while working with their programs. They often would be heard saying things like, " Look, I pressed *B* and got a butterfly." This happened frequently when they were learning the *B* sound in class. This helped make learning more meaningful for them. Because they were relating their previous learning when they worked on the computer. The skill programs helped reinforce learning. Both reading and writing computer programs were selected for their use since these subjects are so closely related. When the selected six students would work on a program in which they created pictures and stories they were highly motivated. Having a choice between the two types of programs offered, the children selected the programs that allowed them to create.

The children went to the computer lab three times per week for one-half hour. They each had their own computers, but at times wanted to work in pairs which the action researcher supported. Working in pairs allowed for peer tutoring, dialogue, and cooperation. There was also a computer in the kindergarten classroom that the children used when they had free choice time. Once again, the action researcher observed a high level of motivation. They wanted to use the computer programs. The children often called the action researchers attention to things they had discovered when using the programs. " Look, here's the word *the*," one child excitedly exclaimed. The sight word *the* had been introduced previously in a reading lesson. This type of carry over from the traditional reading program into the use of computer programs was noted daily.

The use of mutliple intelligences was evident in the instruction and in the student responses while the the students participated in interactive programs created by the kindergarten action researcher. The children first sang a song that was contained within the computer program.. Then, they did a dance that would emphasize words from the song. Next, the song was displayed on the large monitor hooked to the classroom computer. The children's attention was called to the words displayed on the monitor. The action researcher tracked the words as the children watched.

The computer programs that were used for this program allowed for flexibility. Words or letters could be highlighted for recognition. The words to the songs were also printed from the programs so that each child could have his/her own copy. The children then would find and circle words that further developed their reading skills. They would illustrate their copies of the songs so that the action researcher could check their comprehension skills. Then the whole class would read these songs to other classrooms in the school. Once again, this type of interaction and flexibility with the computer programs enhanced their motivation to read.

The kindergarten parents were another important component of the successful use of computers to help the children read. The parents were asked to often write comments about how they felt their children's reading was progressing. These comments were overwhelmingly positive. Parents often said, " I don't know what you are doing, but my child wants to read all the time! Please keep it up!". Examples in Appendix E. While the action researcher wrote weekly letters to the parents explaining what the children were doing with the computer programs, some of the parents found it difficult to understand how this would motivate their children to want to learn how to read. To further help the parent's understanding, the action researcher video taped the children interacting with the technology. Videos were taken of the singing/reading time and computer slide shows. These video tapes were sent home with a different child each day. The parents viewed them with their children and wrote comments which were shared with the class. Also, the action researcher send a letter to the parents that listed the computer programs that the children worked with in school. This information was helpful to the parents especially when purchasing software consistent with the school program. The parents once again were very positive and thankful for the ability to observe how the children became motivated and encouraged to read. In Figure 11a and 11b can be seen the results of the Brigance pre and post-test and the results of the pre and post District Diagnostic Screen.

Spreadsheet of Data

Name	Pre-Test Score	Post-Test Score
Student-1	88	90
Student-2	91	93
Student-3	93	95.5
Student-4	91	100
Student-5	98	97
Student-6	96.5	99
Total possible score	100	

Figure 11a - Brigance pre- and post-test scores.

Graph of Data on Spreadsheet

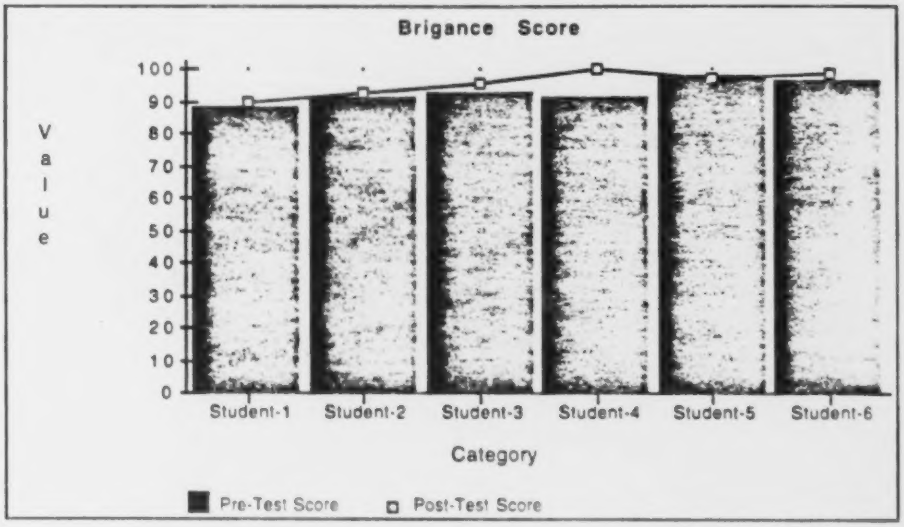

Figure 11a - Continued

Spreadsheet of Data

Name	Pre-Test Score	Post-Test Score
Student-1	32	75
Student-2	48	71
Student-3	51	70
Student-4	37	72
Student-5	41	70
Student-6	42	72
Total possible score	78	

Figure 11b - Pre and Post District Diagnostic Screen.

Graph of Data on Spreadsheet

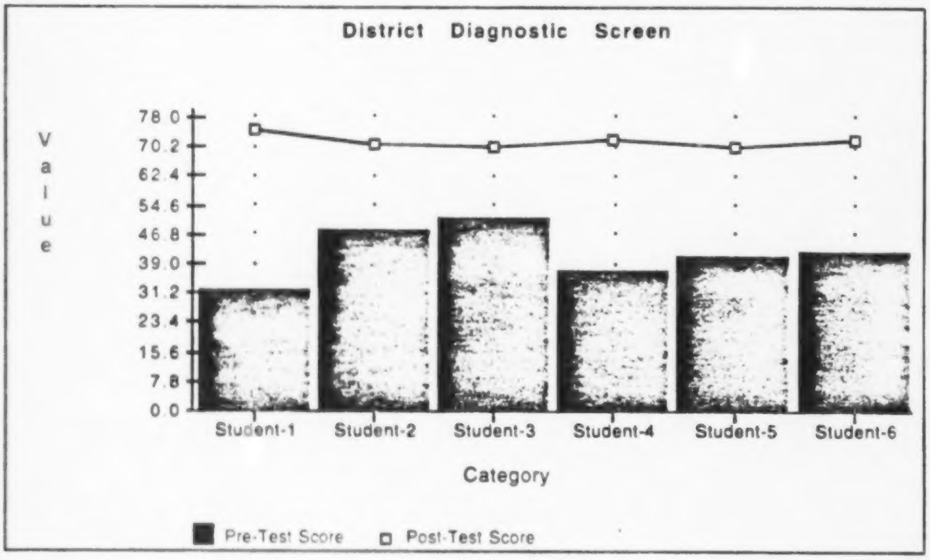

Figure 11b - Continued

Post-test results from the Brigance (Figure 11a) showed an increase of 2.67 percent, while post-test results from the Kindergarten Diagnostic Test (Figure 11b) increased 38.25 percent. The action researcher feels that the Kindergarten Diagnostic Test showed a greater increase due to several factors. The pre-testing of the students on the Brigance was high at the beginning of the study ranged from 88 to 98. The students had lower scores on the pre-test of the Kindergarten Diagnostic Test ranging from 32 to 51. This difference allowed for a more significant increase on the post-test scores of the Kindergarten Diagnostic Test. The Brigance also contains several areas that are more developmental in nature, i.e. gross-motor skills, visual discrimination. On the other hand, the Kindergarten Diagnostic Test contains only academic areas, i.e. recognition of lower and upper case letters and sounds.

The student's growth seemed to reflect the opportunity these students had to reinforce, create, and manipulate letters, sounds, and words. The computer reading programs that the students worked with were flexible, as well as, motivating. These programs enabled the students to use their strengths because of the variety of multiple learning experiences. Visual, auditory, tactile, interpersonal, and intrapersonal intelligences were used by the students as they interacted with the reading programs. When using the reading skills programs, letters and words would appear. In response to the children's answers, there would be visual or auditory signals. When the students worked in pairs they interacted and discussed their choices before making selections. When the students created pictures and stories, they used their ability to hear sounds along with the identification of sight words. The students were assigned by the researcher at random times to work with a partner. The following interactions between the programs and the students were observed by the researcher. The students enjoyed relating information and asking questions of each other. They often would request to work along with a partner on a program. They enjoyed the sharing and interaction of working with a partner. The students learned while having fun. They appeared eager to relate their learning, making the learning experience more meaningful. Growth was fostered by the chosen programs and the way they were implemented.

In summary, the programs selected enabled the students to reinforce their reading experiences, as well as expand them. The experiences of the students using these programs helped them enjoy the reading process. The children learned, reinforced, related, and then created meaningful reading experiences using selected computer programs. The kindergarten action researcher chose the computer programs that would enable these students to increase their reading ability. The students now have a positive and involved interest in reading, which is reflected in the post-test scores.

School Site A - Second Grade

The six children of the second grade class in school A went to the computer lab two times a week for thirty minute time periods. Since all six children attended school A for their first grade experience they were already familiar with the use of a computer including the use of the mouse. During the first few sessions in the computer lab the researcher introduced a program to the whole group. Then during the next few sessions the children were allowed to explore the program on their own. When the students felt comfortable with a program, the researcher would introduce another. After the programs that were being used for the intervention were introduced, the researcher allowed the children to select a program with which they felt comfortable. Then they would use this program to illustrate their stories or focus on a specific reading skill. The researcher encouraged them to play with words and language. The children were in control and received help as needed by choosing the "help" icon at the top of the computer screen or by raising their hand for teacher assistance.

The children worked on the computer programs either individually, paired, or in cooperative groups. When working individually students practiced skills, solved problems, or wrote and illustrated their own stories. At times the students were paired with another child or in cooperative groups; this structure allowed the children to support one another in the learning process, helping promote the social interaction that was essential for the language development. They often would request to work alone rather than with a partner on a program, but they also enjoyed interacting with a partner.

The computer programs were interactive, allowing the children to respond to unique challenges; in responding to the student's answer choice, there would be an auditory and/or visual signal for the student's to respond to. The students were also able to create stories at their own individual reading levels. The children enjoyed working on the reading programs and often expressed their disappointment to the researcher when they would miss a session due to a holiday or cultural arts program. To extend and enrich the computer activities, the researcher provided the children with activities in which they had to apply what they had experimented through the computer program. These activities were interactive and engaged the children's imagination which offered an array of experiences for the different learning styles.

The researcher for the second grade class in school site A was not a second grade classroom teacher but, a resource teacher in the school. Due to the researchers additional job requirement, the six second grade students were only accessible for four thirty minute periods a week. This time constraint made it difficult for the researcher to be as flexible as would a classroom teacher. The communication with the parents of the second grade class was limited but, they were impressed with the work that the students had done. The parents showed their appreciation when stories went home or when they came to a school function and saw the work displayed on walls.

The results of the Second Grade Criterion Reference Test (CRT), 2-5; in Figure 12, shows positive growth.

Spreadsheet of Data

Name	Pre-Test Score	Post-Test Score
Student-1	137	150
Student-2	136	0*
Student-3	132	0*
Student-4	118	0*
Student-5	127	146
Student-6	132	143
Total possible score	150	

Graph of Data on Spreadsheet

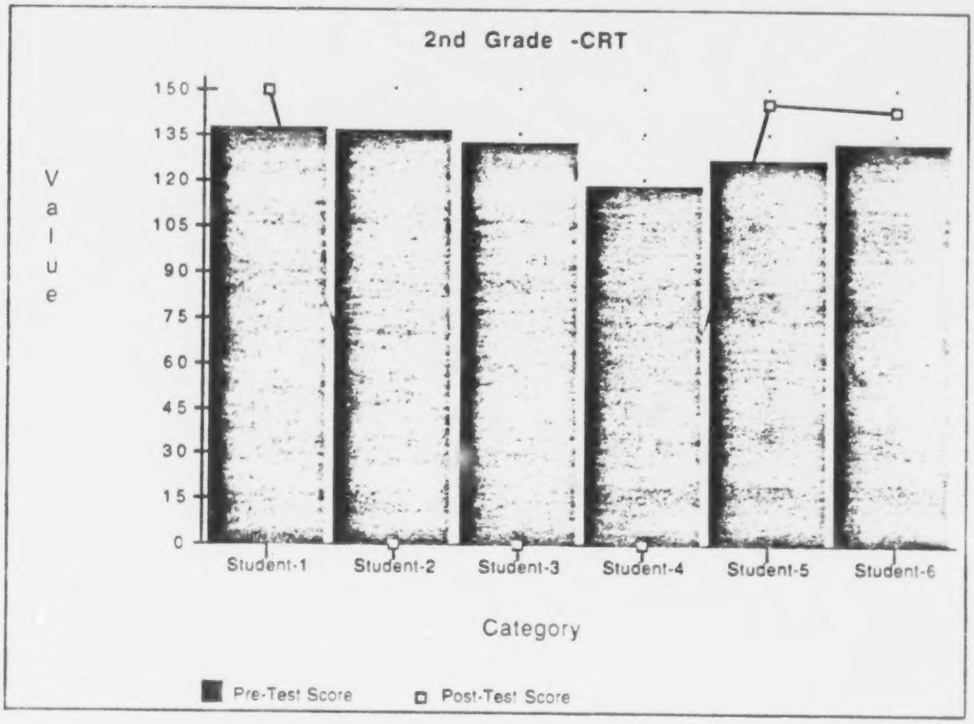

Figure 12 - 2nd Grade Criterion Reference Test (CRT), 2-5

In Figure 12, the asterisks next the post-test for students 2, 3, and 4 indicates that the post-test was unable to be given because the subjects had moved. The post-test results from the Criterion Reference Test (CRT), 2-5; Figure 12, showed an increase of an average of 14 percent. Since the pre and post-test included a wide range of reading skills it helped simplify the task for the researcher to choose some programs that focused on the skills that the students were less able to do, i.e, decoding skills, study skills, comprehension, vocabulary, and literature skills. Since the researcher chose programs; Reader Rabbit, Apple Early Language Connection, and Stickybear's Reading Room, the student's growth in the post-test seemed to reflect the researcher's feelings as to why the test scores in these areas had increased. The researcher felt that the increase in the post-test was partly due to the frequent opportunities the students had at working on the different programs which focused on reading skills such as; vocabulary, comprehension, listening, writing, and viewing. The results of the post-test may be called into question because half of the student sample had moved during the intervention. This was due to the high mobility rate in school site A.

To assist the guidance of the student's progress through the programs the researcher chose programs; Reader Rabbit's Interactive Reading Journey, Stickybear Reading Room, that would require the students to take a post-test at the end of a level before progressing to a different level, area of need, or interest. This helped prevent the students from plateauing at unchallenging level. It also helped them construct meaning as they experienced reading success and built self-confidence.

School Site B - Fifth Grade

The six children of the 5th grade class in school B have had several opportunities working with technology. However, this was the first time they exchanged their regular reading program for the Channel Read Laser program. See Appendix D for program description. They were very excited about using a new interactive program. Since the Channel Read program was in exchange of the regular reading program, the researcher kept the same time frame for lesson plans. The intervention was scheduled five days a week for an hour each day. Each Channel Read program contains one specific story. However, books are not provided for the students. Therefore, the researcher made copies for the students to have at hand along with student work packets. See Appendix F. The stories are very short but meet the objectives of the lesson.

Different reading strategies were introduced depending on the genre being taught. See Appendix G for the list of genre provided. This gave the students many opportunities to use the strategies when reading their own selection of books. For example, mysteries were the first genre the students learned. A student work packet was included for each student. First, they explained what they knew about mysteries. Second, the students were introduced to new vocabulary. Next, the students were taught a new reading strategy. Last, they applied their reading skills by completing the fun activities in their study packets. At the end of the entire lesson for each genre the students were provided with some type of writing dimension and self assessment. The results were very positive and the feedback was immediate.

The students worked extremely well together in cooperative groups and pairs This allowed them to develop better social skills as well as higher self esteem. They especially enjoyed sharing their projects with the class. In addition to the Channel Read Program, the students spent two days on Word Attack to build their vocabulary and the other two days on Read and Roll to develop specific reading skills such as, inferencing, drawing conclusions, sequencing, and main ideas. These programs were all altered to meet the student's individual needs. Therefore, the students did not feel overwhelmed.

In order to see the student's progress a post test was given. Figure 13, shows the results along with the results of the six fifth grade students pre-test.

Spreadsheet of Data

Name	Pre-Test Score	Post-Test Score
Student-1	77	87
Student-2	49	94
Student-3	82	84
Student-4	89	93
Student-5	80	84
Student-6	70	85
Possible Score	98	

Figure 13 - **5th Grade Criterion Reference Test (CRT),2-5**

Graph of Data on Spreadsheet

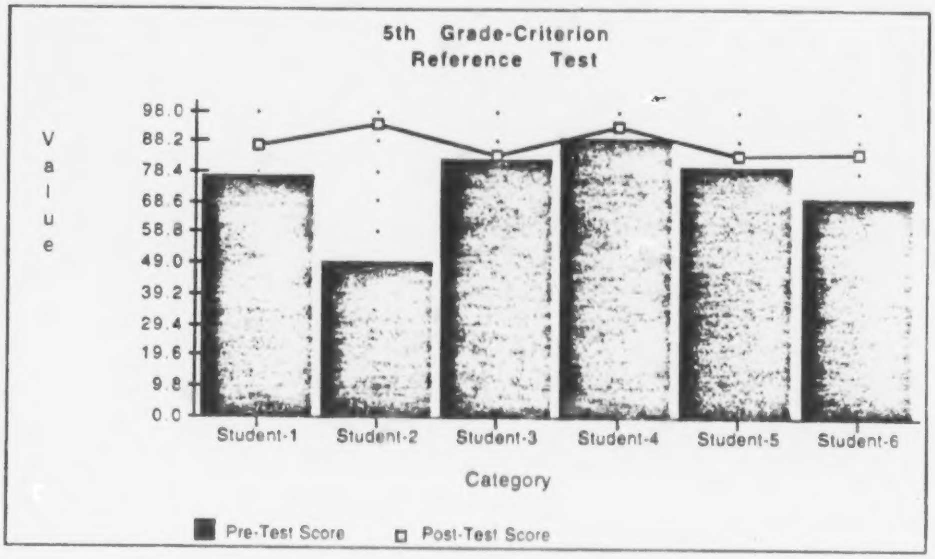

Figure 13 - continued:

After reviewing the students' post-tests, the researcher saw some significant gains. All of the students scored higher in different areas. It kept some of them in the "meets" category. However, two students went from "does not meet" to "meets" and "exceeds" for the requirement. All of the students comprehension scores increased. Also, many of the student's packet activites were well organized and thorough. They were also assigned teacher made quizzes. They all passed with above 90 percent scores. Their scores from Word attack and Read and Roll also increased with time.

These quizzes can be found in Appendix H. Students challenged their own scores each time. When it was time to end the intervention the students were very disappointed. Their attitude toward reading had turned more positive and enthusiastic.

Here are some recommendation for future use. First, the researcher thinks it is better to introduce the Channel Read program in the beginning of the school year. It gets students motivated and excited about reading. Since the characters of this program were true to life, the reading experiences were more meaningful to them. It also teaches the students a variety of reading strategies which would benefit them throughout the year in all subject areas. The researcher suggests not to exchange this program for the regular reading program but make it part of the regular reading curriculum.

The researcher had to develop fun reading incentive activities for the students to keep them involved in reading and experimenting with their new reading strategies, which could be a disadvantage for some teachers. However, they really enjoyed the incentives because they got to choose books that interested them and were not forced upon them. Learning was taking place while having fun.

Conclusions and Recommendations

An essential first step in starting a successful reading program, that uses technology, would be to diagnose the student reading levels. This can be accomplished by giving the students a pre-test that will allow the teacher to chart the students strengths and weaknesses in the area of reading. The pre-test should include a range of reading skills; phonics, sight words and comprehension. Graphing these results would enable the teacher to have a visual guide for placing students in appropriate computer reading programs.

After these results have been reviewed, the next step would be for the teacher to preview software available that would correlate with their students reading deficits. Because of the wide range of software available, this could prove to be overwhelming. To minimize the selection task, the action researchers suggest that teachers limit their choice to programs that concentrate on skill reinforcement and development along with programs that allow children to manipulate words and pictures.

At the intermediate level, the programs should provide a variety of reading strategies and skills. These types of programs proved to be a successful combination when they were used by the action researchers. Computer reading programs should be interactive, allowing students to respond and create. Graphics, recording ability, and word processing capabilities help students have meaningful learning experiences. Because of the tremendous amount of new software and compact discs available the teacher will have to be selective. Referring to the graph of student strengths and weaknesses in reading should make the choices easier. Often companies will send preview copies to teachers upon request. This would be helpful for teachers in schools in which there is strict financial limitations. Previewing will allow teachers to select the best programs for their students.

After making the appropriate selection of programs for their students, teachers will need to begin an implementation plan. Questions such as, "How much time will the students be able to work at the computers?", as well as, "How many computers will be available for students to use?" are important to address. The action researchers feel that consistency concerning the use of computers is one of the components for success. The primary children grew more confident with computers because they had many opportunities to use them each week. The intermediate children already knew how to use multimedia programs. They had previous experiences with using a variety of multimedia programs. Formulate your plan based upon th amount of time available for computer use and the number of computers available.

The use of daily journal entries will help teachers keep track of their students preferences of hypermedia programs. These entries will help guide teachers when selecting hypermedia programs for their students. Teachers should refer to the journal entries when determining the length of time a student will work on a program. These entries can also be used to select or change their student's program. This will help the students remain motivated and involved.

Students can be grouped in a variety of ways. They may work on the computer programs using individually, paired, or in a cooperative group structures. The teachers will need to be familiar with the programs to decide the best organization of their students. The organization should be flexible, allowing the teacher to make changes as she observes the students progress.

The action researchers felt another important consideration for the successful implementation of technology to help improve reading would be parental support and understanding. Because this type of learning could be new to parents, the teachers would need to help make parents aware of how, why, and what will be used to educate their children. One way the action researchers suggest to accomplish this, would be for administrators, along with teachers, set aside some evening presentation to explain the benefits of using technology. The parents could work with the programs that the children will be using. The action researchers found parental support to be a crucial component for the successful use of technology.

In conclusion, the action researchers suggest that the use of technology for teaching reading, can be an exciting experience. The students enthusiasm for using the programs will motivate them to continue to learn. The ability of the students to manipulate and interact with the programs inspires success. The action researchers feel that using the reading computer programs as a tool to motivate, increase, and enrich student learning should be a goal of education.

The action researchers will continue to use technology as a tool to help students improve reading. The researchers found motivation intrinsic within the multimedia programs. Students enthusiasm remained high throughout the intervention. Assessment of students growth was evident to the researchers based on post-test scores. Daily journals reflected positive student attitudes.

Using technology allowed the action researchers to grow professionally. Selecting from the availability of programs helped the researchers to become aware of what hypermedia programs can offer students. The researchers could easily make changes when needed and enhance their students learning using hypermedia programs. Technology allows teachers to be more flexible and creative. The action researchers believe that technology is an essential tool for motivation, reinforcement, and development of student learning.

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Appendices

Appendix A

School Site A

PERCENTAGES OF STUDENTS ESTIMATED TO FALL IN EACH QUARTER OF THE NATIONAL DISTRIBUTION ON CONSTRUCTING MEANING

QUARTER	NATION	STATE			DISTRICT			SCHOOL		
		1995	1994	1993	1995	1994	1993	1995	1994	1993
4 (76-99%)	25%	27%	32%	27%	43%	50%	43%	26%	31%	21%
3 (51-75%)	25%	23%	21%	25%	25%	21%	25%	32%	32%	25%
2 (26-50%)	25%	23%	20%	22%	20%	16%	18%	24%	21%	23%
1 (1-25%)	25%	28%	27%	26%	11%	13%	14%	18%	16%	31%

School Site B

QUARTER	NATION	STATE			DISTRICT			SCHOOL		
		1995	1994	1993	1995	1994	1993	1995	1994	1993
4 (76-99%)	25%	27%	32%	27%	43%	50%	43%	42%	64%	64%
3 (51-75%)	25%	23%	21%	25%	25%	21%	25%	29%	27%	25%
2 (26-50%)	25%	23%	20%	22%	20%	16%	18%	21%	12%	9%
1 (1-25%)	25%	28%	27%	26%	11%	13%	14%	8%	6%	2%

The nationally standardized test of reading comprehension which was used to establish the U.S. comparison was nationally normed in 1984

DUE TO ROUNDING ERROR, THE TOTAL FOR ANY COLUMN MAY NOT EQUAL 100%

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Appendix B

School Site A

PERCENTAGES OF STUDENTS WHO FALL IN EACH IGAP PERFORMANCE CATEGORY

	YEAR	DO NOT MEET STATE GOALS (LEVEL 1)	MEET STATE GOALS (LEVEL 2)	EXCEED STATE GOALS (LEVEL 3)
SCHOOL	1995	16%	63%	21%
	1994	36%	43%	21%
	1993	29%	48%	23%
DISTRICT	1995	10%	53%	37%
	1994	12%	46%	43%
	1993	13%	53%	34%
ILLINOIS	1995	27%	52%	22%
	1994	26%	49%	26%
	1993	25%	54%	21%

School Site B

	YEAR	DO NOT MEET STATE GOALS (LEVEL 1)	MEET STATE GOALS (LEVEL 2)	EXCEED STATE GOALS (LEVEL 3)
SCHOOL	1995	6%	56%	37%
	1994	4%	51%	45%
	1993	2%	45%	53%
DISTRICT	1995	10%	53%	37%
	1994	12%	46%	43%
	1993	13%	53%	34%
ILLINOIS	1995	27%	52%	22%
	1994	26%	49%	26%
	1993	25%	54%	21%

DUE TO ROUNDING ERROR, THE TOTAL FOR ANY ROW MAY NOT EQUAL 100%

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Appendix C

Parent Survey

1. Do you enjoy reading? What do you read?

2. Do you read to your child? If so, how often?

3. What is the primary language spoken at home?

4. How many schools has your child attended over the pastfive years?

5. Do you own a computer?

6. What is your child's favorite subject in school?

7. What do you feel is the most important subject in school?

8. Please list some activities that your family does together.

Appendix D

Selection of Hypermedia programs:

After analyzing and interpreting the results of the selected control groups; Kindergarten- Brigance Screen in combination with the District Kindergarten Diagnostic Test scores, Second, Fifth grade - the previous year District Criterion Reference Test (CRT); 2-5, the researchers concluded that the focus would be on improving reading comprehension, vocabulary and higher-order thinking skills. In order to develop these skills we previewed and selected the following hypermedia programs:

StickyBear's Reading Room - This is a comprehensive reading skills program. The students can choose from four learning activities; Word Bop, Word Match, Word Find, and Sentence Builder, which are presented with colorful, stimulating graphics, sounds effects, and challenging exercises. All the activities feature clear human speech in English or Spanish, verbal and visual reinforcement, on-line help screens, and a report card to keep track of the student's progress.

Kids Pix Studio - This program combines the basic Kids Pix program with the capabilities to animate and create slide shows. The students create pictures using the paint program of Kids Pix. The pictures can be animated using options contained within the program. When the students have completed their picture it can be saved to the slide show option. To make a slide show the students will need to make several pictures created around a central them. Opening the slide show option allows students to select their pictures in order, narrate, and chose a transition from one slide to the next. These steps create the slide show. When finished the students play the slide show by pressing an icon at the bottom of the screen.

Baily's Book House - This program includes 5 activities. The learning opportunities in the first activity, Edmo & Houdini, are: understanding that print carries meaning, matching words, developing visual and comprehensive strategies.

The second active in this program, Letter Machine, helps the students recognize the names of letters, upper and lower case letters, and associate letter names with sound. The Third activity, Make-A-Story, helps children understand that stories have characters, settings, and actions. The fourth activity, Read-A Rhyme, this activity shows children differences in meaning among rhyming words and recognizing final sounds. The last activity, Kid Cards, let's the children use words and images to create words and messages.

Reader Rabbit's Interactive Reading Journey - This program features a rabbit named "Reader Rabbit" along with eleven fictional animal characters in storybooks, letter-land environment, and skill house games. The purpose of the program is to assist emergent readers in developing and enhancing their reading skills and strategies. The program begins with the rabbit giving the student verbal directions. The student then follows the path on the map that is displayed on the screen through forty different stories. These stories ar supported by vocabulary and phonic activities. When the student has listened to the story and completed the related activities, the student then goes into the skill house of games. This section of the program has the student work on decoding and encoding activities that emphasize onsets/rhymes, compound words, two-syllable words, and letter-sound correspondences. When the student has successfully worked through the various games, he/she is then allowed to enter into the next storybook.

Along with these on-line experiences this program offers off-line activities for individual, pair, and whole class work. These activities provide the students with the opportunity to apply what they have learned in the onscreen activity.

Living Books-CD-ROMS - This program is a multi-volume library of CD-ROM software. Some additional features that are includes with this program are: print books, classroom activities, teacher support materials, and supplementary tapes. The framework is designed to help teachers integrate Living Books into the curriculum. This program links technology with a thematic approach to reading. The framework of this program is designed to help teachers integrate Living Books into the curriculum. This program is different from the other hypermedia programs that the researchers chose because it was used primarily by the researcher rather by the students.

Reading/Singing Program - This program was created in part by the kindergarten action researcher. Using multimedia programs that contain word processing, recording, laser disks, and CD Rom options, the teacher selects a song. The words to the song are typed and the song ion is created dependent upon the format of the song. When the program is complete, the children listen to the song several times. Dances can be created that pantomime words contained in the song. The action of the dance helps the young student to reinforce word meaning. i.e. the student will jump when the word jump is sung in the song. After the students become familiar with the lyrics the written words are introduced using the word processing component of the program. The words are displayed on a large monitor that connects to the computer. The teacher tracks the words of the song using the arrow created by the movement of the mouse. The multimedia programs are flexible, allowing the teacher to enlarge and emphasis words and letters when needed. The teacher can use the program to teach left to right tracking along with sight vocabulary, strategies for decoding, and context clues. The songs can also be printed out to make individual copies for the students. The students can illustrate the songs. These illustrations can be a guide for teachers to check student's comprehension.

Stickybear' Early Learning Activities - This program contains five activities that the children may choose from, Alphabet, Counting, Grouping, Shapes, Opposites and, Colors. After the activity has been chosen Stickybear will announce the name and provide brief verbal instructions on how to play.

Kid Works 2 - This program provides a whole new reading and writing environment for students learning to write and illustrate, and listen to their own original stories. By combining a word processor, paint program, and advanced text-to-speech technology, this program lets children express themselves through words and pictures. Beginning readers learn to make the connection between symbols and printed words, while more advanced readers can put original ideas together to complete a story.

Word Attack Plus - This program is a five-part vocabulary building program designed to help students learn new words, their meanings, and usages in an interesting and exciting way.

Students work at their own pace and receive positive reinforcement as they progress. The students also have the opportunity to enjoy the action and challenge of the motivating arcade-style game. Learning vocabulary should be a positive and fun experience.

Inspiration - This program is a visual idea development tool for developing ideas and plans. It fully integrates an easy-to-use Diagram view and a powerful Outline view. The Diagram view is to generate ideas, plan and create diagrams. The Outline view is for organizing and writing. Inspiration's integration of these views gives two different perspectives of the same information: a graphic view and a text view. The integration of diagramming and outlining environments provides one tool for all of the students' idea development and planning requirements. This program lets the students work in two different views: a Diagram view and an Outline view. The Diagram view is used for visual brainstorming and creating diagrams. The Outline view is used for organizing and writing.

The students should generally begin by brainstorming in the visual diagramming view, creating maps that clarify and focus their work. Symbols hold each concept and links associate ideas. Inspiration helps the students see relationships, thought patterns, and themes.

Channel R.E.A.D - This program is a task-oriented curriculum that approximates real-life problem solving. It is not only for students who need additional support but for all students. In using this program the students will interact with a cast of characters and with classroom peers to solve problems using reading and writing skills. This will involve them in a process that is both entertaining and intellectual stimulating. This program includes fifteen videodiscs; each videodisc focuses on one literary genre, a reading strategy, and skill. This program also meets the needs of students from varying backgrounds and with varying levels of reading proficiency through lessons that promote interaction and speak to individual learning rates and styles. By using all the videodiscs, students can see that reading is enjoyable and valuable in their own lives while guiding them to read and communicate effectively.

Read-N-Roll - This program is a reading game that helps students improve comprehension in the five main areas; recognizing the main idea, recalling facts, identifying the sequence of events, drawing inferences and building vocabulary skills.

Appendix E

Parent Comment Sheet for Reading Program

is doing well on her reading and
needs less help with words. I am impress
that they are learning punctuation marks. She
knows how to read a word with an
exclamation mark. and ask me what a p
means (she forgets) or what quotation marks
are. I am just glad she even notices th
marks. You are doing a good job of teach

I'm also impressed with her progress.
She is a good listener. Thanks for
sharing this with me. It helps me
guide her learning. J. Kar

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Parent Comment Sheet for Reading Program

I believe that when the kids are bringing home books to read for homework, they are getting that sense of responsibility which will prepare them for first grade. We love to read with John every evening. becomes very happy & proud when he reads the whole book on his own. Keep up the great work!!

I'm very impressed with progress. His reading is fluent and his vocabulary continues to grow. Thanks for working with him!

J. Karlin

Whenever comes home with a new, more challenging book, he'll try to tell me, "Mom, I can't read this, this is too hard." I then remind him that he can do whatever he wants if he tries. Then we sit down & read the book together for a couple of times & that's when takes off, "Mommy, I can do it!" I work with him just the way you asked me to. To first recognize certain words & sound the rest & it's been wonderful. You truly are a terrific teacher.

What a nice note! Thanks. Keep encouraging John. He can do whatever he wants, he is very capable. Each time he accomplishes something new his self-esteem grows. J. Karlin

Parent Comment Sheet for Reading Program

[illegible] to read. She tries to [illegible] read the harder book. It takes her [illegible] longer to recognizes some of the words but when she does [illegible] so excited that she can't put the [illegible] down. You can tell she's so proud [illegible]

She also recognizes and points out [illegible] she sees on TV [illegible] and even when [illegible] driving on the road. And she [illegible]

I [illegible] the books you have for the [illegible] are wonderful and gives them great confidence in them self that they can [illegible]

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Parent Comment Sheet for
Reading Program

is doing a terrific job
reading She is so proud of herself
as is her dad & me & her grandparents.
She stayed with her grandparents over this
past weekend her grandfather had not heard
her read before & could not get over the
fact that a kindergartener could read.
Very impressive this Reading Program

What a nice note! I'm so glad
your parents got a chance to hear
her read. She is impressive. Thanks
for encouraging her progress and
surrounding her with literature.

J. Korb

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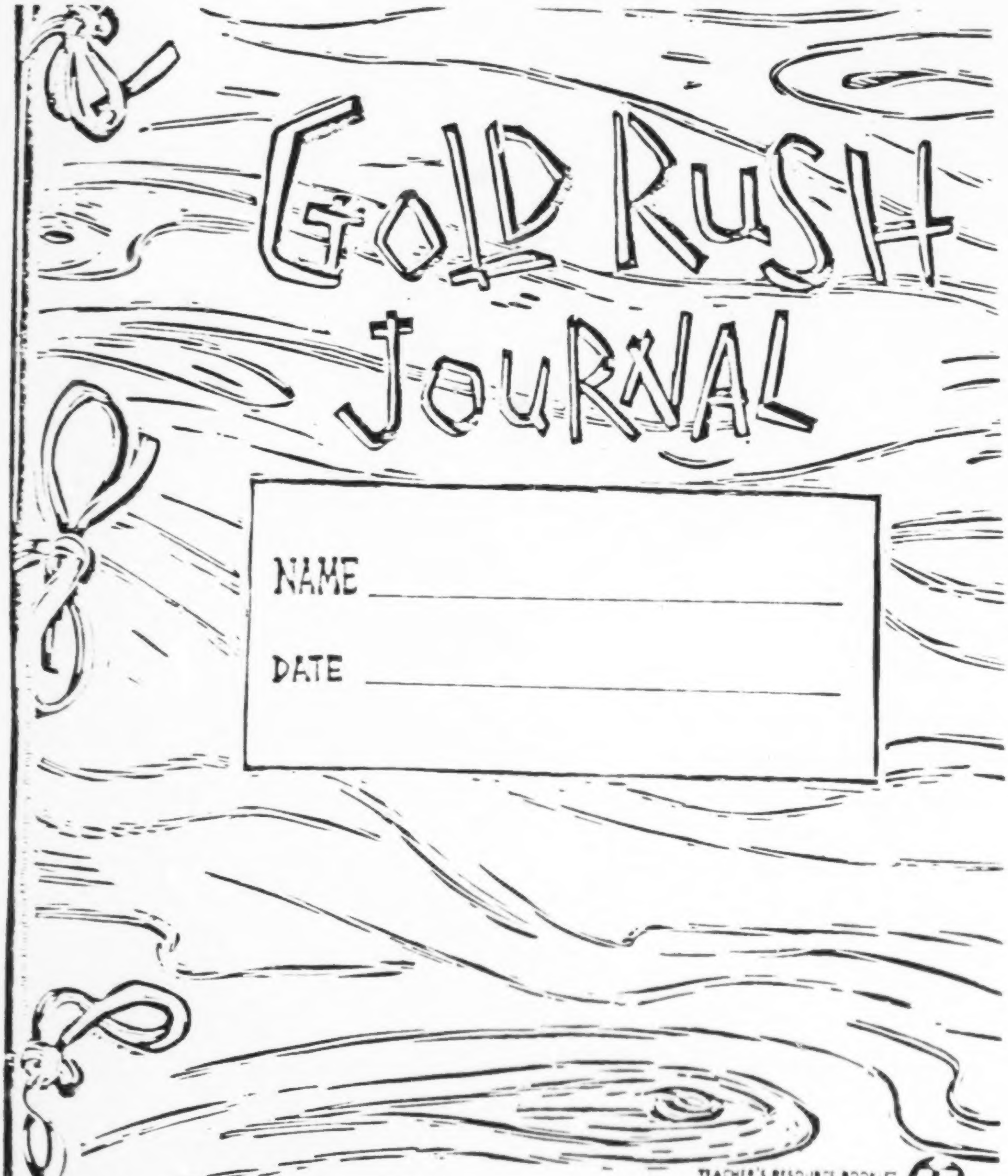
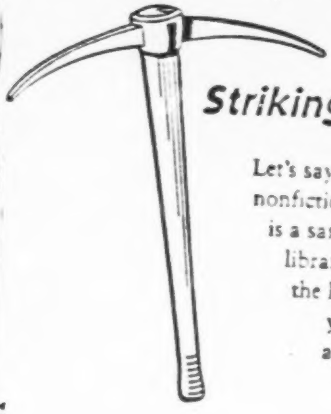
Appendix F


GOLD RUSH
JOURNAL
NAME
DATE
TEACHER'S RESOURCE BOOKLET
15
Gold Rush Journal



Striking it Rich in Nonfiction

Let's say you want to go prospecting for some nonfiction books about various subjects. Here is a sample of what might be buried on the library shelves. Match the questions on the left with the titles on the right. As you do so, notice the different approaches that the nonfiction writers take.

_____ **1.** Which book looks at tools, furniture, and other items invented by the Shakers?

_____ **2.** Which book could provide you with more information about Benjamin Franklin?

_____ **3.** Which book describes the career of an inventor who was the son of runaway slaves?

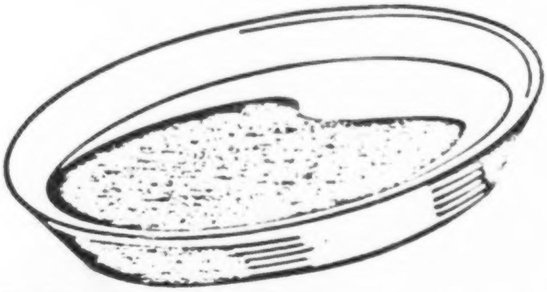
_____ **4.** Which book might have been titled *Errors that Succeeded*?

A. *Shaker Inventions* by Nancy O'Keefe Bolick and Sallie G. Randolph.

B. *The Real McCoy: The Life of an African American Inventor* by Wendy Towle.

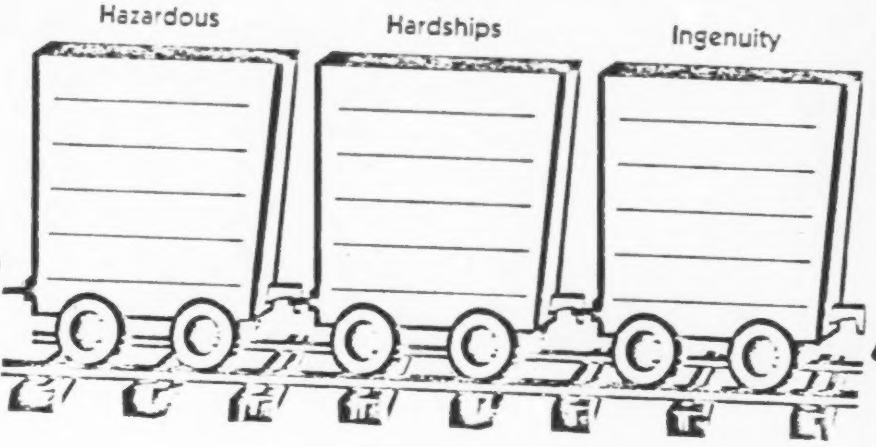
C. *Mistakes that Worked* by Charlotte Foltz Jones.

D. *Benjamin Franklin: Scientist and Inventor* by Eve B. Feldman.



Mining for Synonyms

Gold is sometimes mined from shafts, the way coal is. In the mine shaft at the bottom of this page are fifteen words. Dig them up and put them into the mining cars under the words that are their synonyms. Remember that synonyms are words that are close in meaning (*mine, dig up, unearth,* and *shovel* are synonyms).



brilliance
risky
snags
skill
trials

misfortunes
perilous
intelligence
troubles
dangerous

difficulties
threatening
unsafe
cleverness
creativity

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Summarizing Informational Text Through Main Ideas and Supporting Details

Read the following nonfiction text that tells the story of Levi Strauss and blue jeans. As you read, think about how the main idea and supporting details work together. Then, write answers to the questions that follow.

Strauss ran out of canvas and wrote to his brothers on the East Coast to send more. Instead, they sent a tough brown cotton cloth called denim. Levi dyed it blue and began making pants out of denim rather than canvas. The pants proved to be a hot item and sold well. Then, as legend has it, a miner named Alkali Ike complained that the pockets of his pants tore away from the pants when he stuffed them with ore. The ingenuity of a Nevada tailor named Jacob Davis solved the problem. He took the pants to a blacksmith and had the pockets riveted to the pants. Soon after, Strauss heard the story, patented the rivets, and hired Davis as a regional manager. Today, copper rivets remain a trademark of Levi's jeans.

Here's the main idea from this text:
There were a few small events that led to the development of blue jeans as we know them.

List as many supporting details as you can for this main idea.

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Focusing on Fabric Facts

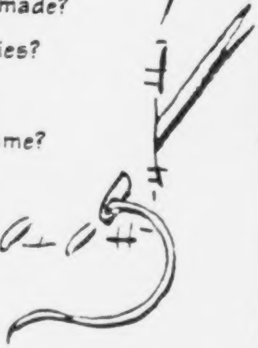
Learning about different kinds of cloth might be fun for everyone. Begin with some library research. You might also ask a fabric store manager or a professional seamstress or tailor for information. Choose a cloth from the list below and then weave the information into a paragraph or two. If possible, include a sample or a picture of the fabric you choose. As a class, assemble your paragraphs into a nonfiction book of fabrics.

What is the fabric made of? How is it made?

What are this fabric's special qualities?

What is the fabric used for?

What is the history of the fabric's name?



wool
burlap
canvas
felt
silk
cambric
denim
seersucker
rayon
damask
corduroy
poplin
cotton
polyester
voile
linen
velvet
muslin

Focusing on Fabric Facts

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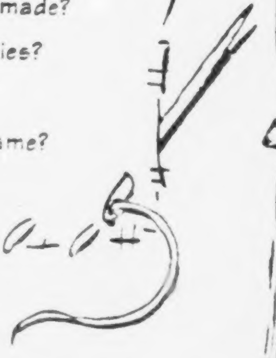
What is the history of the fabric's name?



wool
burlap
canvas
felt
silk
cambric
denim
seersucker
rayon
damask
corduroy
poplin
cotton
polyester
voile
linen
velvet
muslin

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The Rush is On

► ENGLISH TEXT

An excited man races up and down the streets of San Francisco shouting "Gold! Gold!" In his hand he holds a bottle of shiny yellow dust. Soon, all but a hundred residents from this small town of 1000 rush off for a place called Sutter's Mill. There is money to be made digging shiny pebbles out of the earth.

The California Gold Rush began in 1848 when a carpenter named James Marshall accidentally discovered gold when he was building a sawmill on the farm of John Sutter. Soon, gold fever quickly spread across America.

By land and by sea, hordes of gold-seekers headed west, following a trail of unbelievable stories: gold-lined streams, gold nuggets that could be plucked like hen's eggs, and plants that held gold pieces on their roots.

These miners were nicknamed "49ers" after 1849—the year they arrived.

The Gold Rush was a historic event that changed the face of the entire West. In 1847, a mere 500 people lived in the "village" of San Francisco. By 1850, less than four years after the discovery of gold at the Sutter Mine, the city's population had swelled to a whopping 35,000. Three years later that figure had already doubled to 70,000. San Francisco was the wildest, fastest-growing city in the world!

But with the influx of people came new hardships.

Many 49ers encountered problems on their long, hazardous journeys west. Others endured rough conditions in makeshift mining camps set up just outside of San Francisco. And the actual work of mining was difficult and exhausting. But what were hardships to some people presented opportunities to others. Out of the experience of the California Gold Rush came great ingenuity and many inventions.

An Inventor's Gold Mine

When people mention the word *inventor*, many imagine a weird scientist, working late hours in a laboratory. Actually, most inventors are average people who find a need and see a better way of doing something. Inventions

(Continued next page)

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often begin as ideas—ideas for ways to make a job easier. The Gold Rush presented many opportunities for finding ways of doing things. Miners were often the ones who got creative ideas.

One of the most welcome inventions was one that improved the process of "panning" for gold. To pan, a miner filled a flat pan with dirt and water, then swirled it until the heavy gold separated. It was backbreaking work. With the invention of the "rocker," mining became easier. A rocker was a wooden box that allowed miners to work in pairs, sifting more earth more efficiently.

During the Gold Rush, other inventions cam from the flood of new merchants who flocke to the West, hoping to make their fortunes b providing goods and services to the 49ers. Besides better equipment, miners also neede better clothes that were suited for the rugged conditions.

Many miners had to make do with the thin, flimsy clothes they had brought with them from the East. These tore easily, and offere little protection from the chilly waters. Their only hope was that one day an inventive merchant would dream up the idea of pants that were sturdy enough for a miner's life.

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EXPLORER'S LOG

NAME: ______________________________

DATE: ______________________________

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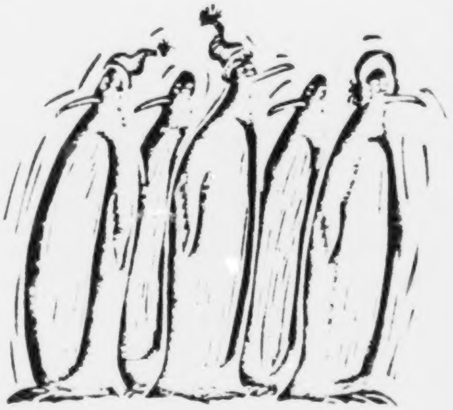
Word Watch

Words to Make You Shiver



Word Watch Vocabulary

eager
determined
accomplished

Your vocabulary words are used in the clues below. Can you unscramble the answers? Write each unscrambled word on the line.

1. Something an Arctic explorer is eager to find: THRON LEOP
____
2. What an accomplished actor hears: ESALPUPA
____
3. What determined people try to reach: LOAGS
____
4. How to become accomplished at something: ECPRCTAI
____
5. What people are often eager for: SSSCCUE
____
6. What a determined sports team might do: NIW HTE MEAG
____

Now make your own puzzle for a friend. Complete each of these sentences with a scrambled word. Can your friend unscramble it?

One thing I am eager for is ______________________________

I am determined to ______________________________

I'd like to be an accomplished ______________________________

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Noting Cause-Effect Relationships

Cause-Effect Chart

Why did Matthew Henson decide to go to the North Pole?

Paige, Theo, and Manuel have come up with their own answers to that question. Write your answer below, and then compare it with theirs.

____

____

There are many cause-effect relationships in *Explorer on Top of the World.* When you have finished reading, do some rereading and thinking. Fill out the chart below.

Events	**Causes** (Why did the event happen?)	**Effects** (What happened as a result of the event?)
At the age of 13, Matthew Henson decided to go to sea.		
Henson quit the sailor's life.		
Robert Peary came into the hat store where Matthew Henson worked.		
Henson worked on a canal project in Nicaragua.		
The Eskimos taught Henson how to survive in the Arctic.		
Peary got the credit for being the first explorer at the North Pole.		

Compare your answers with your classmates' answers.

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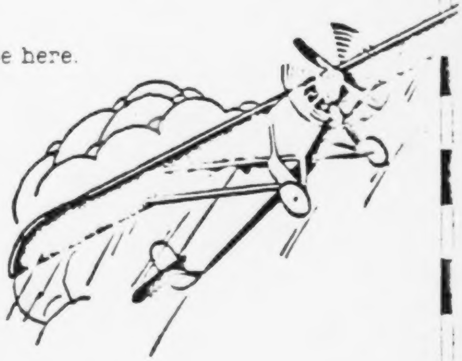
"She's just landed!" Noise of airplane engine and propeller.

Cut to AMELIA EARHART jumping onto ground, as if from plane.

AMELIA:
(smiling and waving)
What a grand crowd! I'm delighted to be here.



VOICE OF REPORTER:
(excitedly)
Miss Earhart, how was the flight?

CU AMELIA's smiling face.

AMELIA:
The usual mechanical problems. But thrilling!

#2. Cut to photograph of Amelia's airplane.

SFX: Sputtering engine and whirling propeller noises of early airplane.

NARRATOR'S VOICE:
The year is 1929. Amelia Earhart is the most famous woman pilot in America.

★ ★ ★

Look back over the biography *Explorer on Top of the World.* Choose one scene, and try writing a shooting script for it.

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Self-Assessment

Video Interview

Well-known Biography TV reporter Tella Toodeecamra wants to shoot a video interview of you. It will be shown on a special segment of "You Thought It. We Shot It." So get ready to talk biography. You're on the air.

Tella: I understand you've just read a biography about explorer Matthew Henson. What did you think about it?

You: ____________________

____

Tella: Did you also learn new things about other times and places? Tell the audience about it.

You: ____________________

____

Tella: In what ways could the biography have been better?

You: ____________________

____

Tella: Do you like biographies? Would you like to read more biographies?

You: ____________________

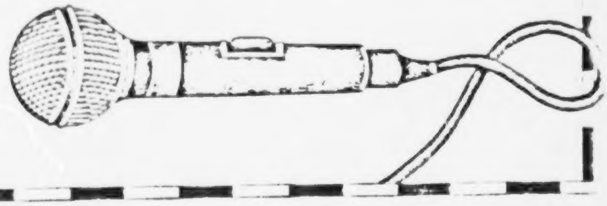
____

Tella: What could you get from reading a biography that you couldn't get from reading, say, a fantasy or a mystery?

You: ____________________

____

TELLA (turning to camera):
Well, folks, you heard it
here! So get out there,
and read those biographies!



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was far from perfect. Some crew members treated Henson badly because he was black. Because of this, Henson sadly left his sailor's life behind.

After a time, he returned to Washington, D.C., where he took a job in a store, selling hats while longing for adventure.

One day a customer walked in, looking for an unusual hat. What Matthew Henson could not know at the time was how dramatically this chance event would change his life.

On an ordinary day, Matthew Henson was working in the hat store when a man named Lieutenant Robert Peary walked in and told the owner he needed a sun helmet for a jungle expedition. He also needed to hire a personal assistant for the trip!

"I know just the man," the owner of the store replied.

Peary's mission was to locate a route for a canal the United States government would dig across Nicaragua, connecting the Atlantic and Pacific oceans. Eager to return to a life of adventure, Matthew Henson signed on, and the expedition took him and a team of explorers through the steaming jungles of Nicaragua.

As on the *Katie Hines*, Henson worked hard to get his employer to see past certain conclusions he had drawn about his abilities — conclusions based on the color of Henson's skin. At first, Henson's job was as a servant, doing Peary's laundry. But when the lieutenant saw how intelligent Henson was, he put him in charge of building the expedition's headquarters. From there, Henson's responsibilities kept growing.

Despite the hardships of the expedition, Henson was saddened when it ended. He knew there were few opportunities for African Americans back home as challenging as the work he had done in Central America. On the return voyage, Peary asked Henson to his cabin. "You've done excellent work," Peary said. "And I will soon be departing for an expedition to the Arctic. We will attempt to reach the North Pole. How would you feel about coming along?" Henson leapt at the opportunity. But life in the Arctic proved extremely harsh. Peary's crew of six hunted for much of their food, as the Eskimos did, built igloos, and traveled by dog sled. And as a black man, Henson faced additional obstacles. Henson was paid only half of what the other men received— even though Peary admitted that Henson was the expedition's most valuable member.

Henson learned the Eskimo language and could communicate with the Eskimos on the expedition. Because the Eskimos trusted Henson, he was able to learn from them how to survive in the harsh Arctic environment. And Henson was an expert at handling the dogs that pulled the expedition's sleds. Sometimes he even acted as a medic. Despite being such an accomplished explorer, Henson was rarely mentioned in newspaper updates of the expedition.

Henson returned to the Arctic five times with Peary. But after many setbacks, a discouraged Peary wrote, "The game is off. My dream of 16 years is ended. . . ." And the explorers headed home.

But neither Peary nor Henson could put aside their dream of making their way to the North Pole. On July 6, 1908, they headed out on yet another polar expedition. Ten months later, the explorers were just 35 miles from the Pole.

(Continued next pa

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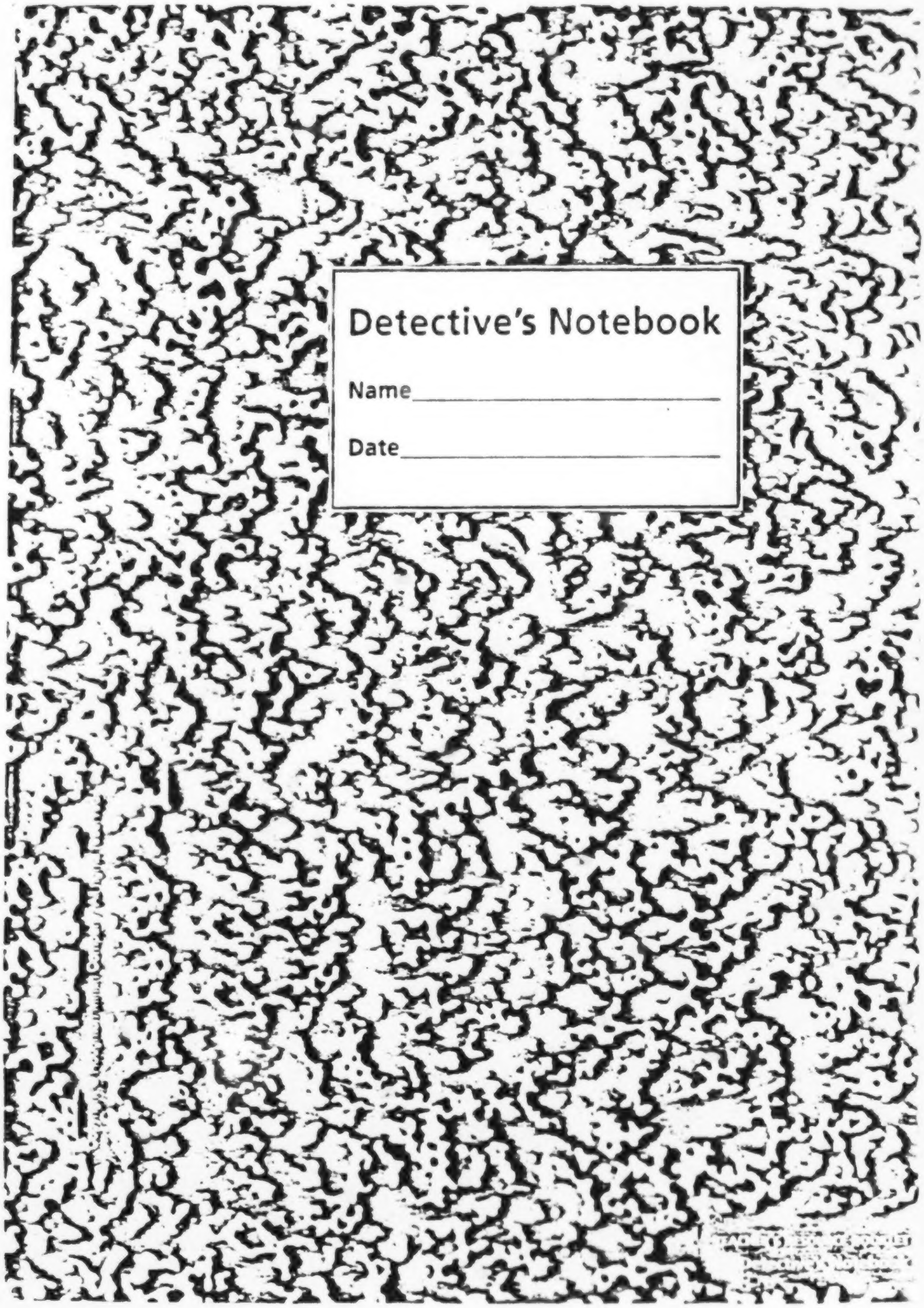
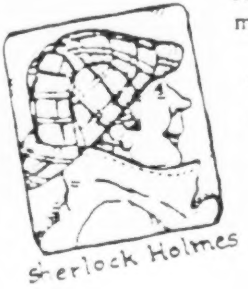

Detective's Notebook
Name
Date

Hidden Talents

Miss Jane Marple

Agatha Christie created Miss Jane Marple, Carolyn Keene created Nancy Drew, and Arthur Conan Doyle created Sherlock Holmes. Have you read any of their mysteries? Have you seen any detectives solve mysteries on television? Describe detectives and mysteries you know from books or TV.



To learn tips for tracking lost objects and solving future mysteries, see what you can uncover in these stories.

- *The 123 Zoo Mystery* by Susan Pearson
- *The Valentine's Day Mystery* by Marion Markham
- *Meg Mackintosh and the Mystery in the Locked Library* by Lucinda Landon

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Word Watch

Sentence Mysteries

The sentences below will be no mystery once you've provided the missing information. First complete each sentence by writing the correct vocabulary word in the blank. Then unscramble the letters that fall in the circles to complete the statement at the bottom of the page.

BOOKMOBILE

Word Watch Vocabulary:

alibi suspect culprit impostor

Theo uses his Detective's Notebook to list clues and to make extensive notes about each ___ ___ ___ ___ ___ ___ ___, or each person who may have committed a crime.

On one case, a known criminal told Paige that he was "washing his hair" at the time the crime was committed. "That's the worst ___ ___ ___ ___ ___ I've ever heard!" she laughed scornfully.

Manuel, who has a flair for the dramatic, once ripped a false mustache off a crook and declared, "You, sir, are an ___ ___ ___ ___ ___ ___ ___ ___!" The man, grabbing his upper lip and fighting back tears, said, "Ouch! Please! I am guilty, but that is no way to treat a ___ ___ ___ ___ ___ ___ ___!"

Now take the mystery out of this statement by putting the right word in. Use the circled letters from the sentences above to form the word.

Because Theo, Paige, and Manuel each play a part in working together to solve crimes, they make a great detective ___ ___ ___ ___.

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Stop and Think Strategy

Stop and Think

Take your time. Use your mind.
The more you look, the more you'll find.
Look for clues that you can use.
With Stop and Think, it's hard to lose.
So here's the list of helpful rules.

1. Stop and think about what you've read so far.
2. Scan the pages you have already read.
   - Look for clues in the illustrations.
   - Pay attention to headings, captions, and words in special type.
   - Look for key words and ideas.
3. Think about why you might be having trouble.

   Did you miss some important information?
   - Reread carefully some or all of what you have read.

   Did you change your predictions based on new information?
   - Change your predictions as needed.

   Were there key words you did not know?
   - Use what you know about Reading New Words.
4. Read ahead in the selection.
   - Additional information may help you understand better.

If you are still confused, ask someone for HELP.

Post this someplace where you'll read it. • You never know when you might need it.

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Private Eye Guide

Which details in *"Mystery on the Trans-Siberian Express"* do you think might or might not be clues? Shown below are the three suspects in the story. Write the details concerning each suspect that you think might be important in solving the mystery. Also tell which details you think are not clues and why.

An important clue or just a detail?

An important clue or just a detail?

Admiral Ferry

An important clue or just a detail?

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Be a Mystery Writer!

Read the unfinished story below and put together the clues contained in the story's events to solve the mystery. Remember, pay close attention to the details! Then, on a separate sheet of paper, write the ending to the story.

The Unfinished Lunchbag Mystery

"Walt is going to be awfully hungry by the end of the day," Sheila commented, smiling. The half-dozen gymnasts standing in a knot outside the cafeteria nodded in agreement.

"Why is that?" asked Eve Malone, girl detective.

"Because," said Sheila, who had blazing red hair and was captain of the squad, "someone has stolen his lunchbag. And no one likes to eat lunch more than Walt!"

"Or eat more lunch than Walt," said one of the gymnasts. They all laughed.

Just then Walt shuffled up, head hanging. "I'm hungry," he said. "I wish I could find my lunchbag."

"Do you know what was in it?" Eve asked Walt.

"Yeah. A pear, a box of Fig Two-Tons and a submarine roll filled with peanut butter and carrots."

"E-e-o-o-h!" moaned the gymnasts in unison.

". . . and carrots," Eve murmured, finishing the note she was making in her spiral-bound detective's notebook. She sized up Walt. He wore a sweat shirt, jeans, and purple high-tops half unlaced.

"Okay, Walt," Eve said. "Where were you when your lunchbag was stolen?"

"In the bathroom washing my hands," Walt replied.

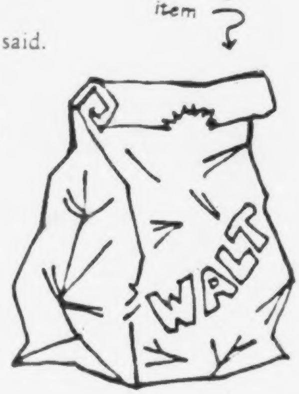
"You had placed your lunchbag—I assume it was the plain brown kind—on the table in the cafeteria before you left to wash your hands, and when you came back it was gone?"

"Yes," said Walt.

"One more question—Were you at the gymnastics-team meeting that was held in the cafeteria right before lunch period?"

"I wasn't at the meeting," Walt said. "I quit the gymnastics squad last week—I was sick of being the bottom of the human pyramid." Walt looked sadly at the gymnasts. They directed stony stares back at him.

the missing item



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READING DIMENSION DETOUR

MORE MYSTERIES

BANK ROBBERY

In mystery stories, a detective is often a main character, and is sometimes the hero or heroine. Imagine that you are a mystery writer. Who is your detective? What is he or she like?

My detective's name is ______

______

My detective likes the kind of cases that ______

______

______

______

______

When things get tough, my detective ______

______

______

My detective and I are alike because ______

______

______

My detective and I are different because ______

______

______

In the space provided, write why you think a kid would be a good detective ______

______

______

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SELF-ASSESSMENT

After a mystery is solved, a detective sometimes shares his or her private thoughts about the case. So before you close the book on your own detective work, take a few minutes to sum up your feelings for the record.

Which case did you think was harder to crack, "Mystery on the Trans-Siberian Express" or *The Case of the Missing Mystery Writer*? Why?

What advice would you give someone who is reading a mystery? Rank the three tips below from what you think is most important to least important by writing the number 1, 2, or 3 next to each tip. Use the number 1 for the most important item. Then add some advice of your own to the list.

☐ Make sure you understand the vocabulary.

☐ Note details at the scene of the crime.

☐ Stop every now and then to think about what has happened.

My Advice

Describe which of the above tips you followed most effectively. Also tell why you do or do not enjoy mystery stories.

CASE CLOSED

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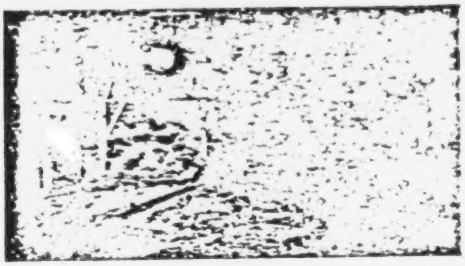
"Mystery on the Trans-Siberian Express"

► ENGLISH TEXT



I

After solving another difficult case, I, Inspector Hammet, the most famous detective in the world, boarded the Trans-Siberian Express in search of relaxation. However, the fifth night of my journey, at 11:45, I heard a bloodcurdling scream.

I threw on my robe and raced down the train corridor. I found Mrs. Edwina Simmons McFisk in her compartment holding a small terrier in her arms. The dog barked, baring its sharp, little teeth. Mrs. McFisk cried out, "Blueberry, please! Behave."

After she had quieted the terrier with a muffin, she said to me, "Inspector Hammet, the world's greatest detective, thank goodness you are here! My precious diamond has been stolen!

Mrs. McFisk explained that when she last saw her diamond, it was in her jewelry bag beside Blueberry's doggy bed. She discovered it missing when she was awakened by the sound of a door closing, a door that she had locked before going to bed.

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When the porter arrived, he told us that Mrs McFisk's compartment key was missing from his chain. He also told us there were three other passengers in our train car.

I asked the porter to seal off the car and brin the other passengers to me for questioning.

II

My first suspect was Italian opera singer. Signorina Carola Turra.

When she entered the room, Blueberry jum and howled. Only a blueberry muffin could quiet him. I quickly deduced how the frisky terrier got its name. After I greeted Signorina Turra, she silently handed me a small card that said:

> *Inspector, I regret that a sore throat prevents me from speaking. I must save my voice for the Vladivostock Symphony.*

I produced a notebook and pencil and sugge ed that she write her replies. I soon learned that the Signorina had spent the evening in h compartment.

While the Signorina was writing, I pointed o a spider that was crawling on her slipper.

Instead of crying out in surprise, she droppe her purse. I returned the bottle of throat med cine that fell from it.

My next suspect was the noted travel writer. William Davies, who entered saying:

(Continued next p

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"Another muffin for you, Blueberry, you adorable puppy, you."

Then I asked him his whereabouts the past evening. He petted the contented Blueberry, as he told me about his dinner with Mrs. McFisk.

After dinner, Davies said, he had returned to his room and worked on a new travel book about Sierra Leone—until the porter arrived to move one of Davies' large trunks. He suggested that the porter would remember this event because he had held the porter's white jacket, so it would not get soiled.

As Davies was leaving, I shared with him my fond memories of visiting Sierra Leone in South America. We both agreed that it's lovely there.

My last suspect was Theodore Perry, an imposing man to almost everyone except Blueberry, who snapped and snarled at him. I asked the Admiral to describe how he had spent his evening.

"Resting in my compartment, with a nasty case of motion sickness," the Admiral said, patting his tender tummy.

The Admiral also told me that he had a witness—the porter, who had entertained him with sea shanties to help him forget about his queasy stomach.

At that, I sent the Admiral on his way, for I knew who the culprit was. I also knew that the culprit was an impostor.

III

I assembled the suspects in the lounge car where I reviewed each alibi.

I explained my initial suspicions that Signorina Turra was lying about her voice. However, when I discovered her medicine bottle, I realized that she was truly an opera singer trying to save her voice. As for the Admiral, I asked, "Whoever heard of an Admiral who suffers from seasickness?" I almost believed him to be the impostor, until he displayed his love for the porter's sea shanties.

That left only Mr. Davies, the true criminal.

In the end, Blueberry gave him away. Mr. Davies was the only suspect who knew that the way to Blueberry's heart is with a muffin.

Thus, only Davies could slip in and out of Mrs. McFisk's compartment without rousing Blueberry.

And only Mr. Davies had an opportunity to steal Mrs. McFisk's key. While the porter carried his trunk, Mr. Davies held the porter's jacket, slipped his hand into the pocket, and took the key.

As to whether this is the real Mr. Davies—it is not! The real Mr. Davies, a noted travel writer, would have known that Sierra Leone is in Africa, not South America.

Finally, I asked the porter to bring me the impostor's trunk. We opened it, and to everyone's surprise, except my own, of course, the real Mr. Davies stepped out.

It didn't take me long to deduce that the impostor had taken the place of the real Mr. Davies, forcing him into the trunk.

After returning the diamond to Mrs. McFisk, I learned that the impostor was the real Mr. Davies' brother, a professional jewel thief.

And that is how I, Inspector Hammet, the most famous detective in the world, solved the "Mystery on the Trans-Siberian Express."

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Production Notebook

DO NOT REMOVE CLIPBOARD

Reserved for

____

Date

____

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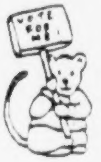
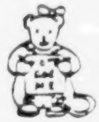
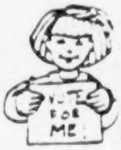
TAKE ONE! TAKE TWO!

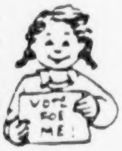
In realistic fiction, the characters, setting, and events are based on real incidents or on made-up events that seem real. Complete the summary below by circling the picture or pictures that show true-to-life elements that would belong in a realistic fiction story. Talk with friends about why the other pictures don't belong.

1. Two



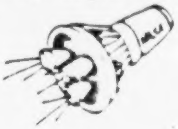
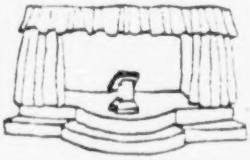




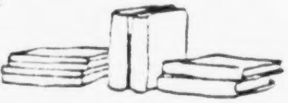
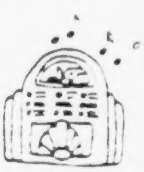


are running for class president.

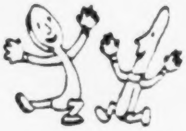
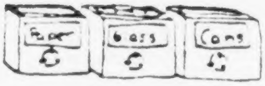
2. The candidates, Angie and Cara, will give speeches in the

3. Angie thinks the school needs more

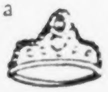
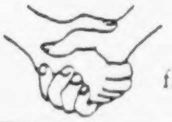



4. Cara wants more

in the cafeteria.

5. The election winner will receive a

from the principal.

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Word Watch

Frustrated by a Skimpy Vocabulary?

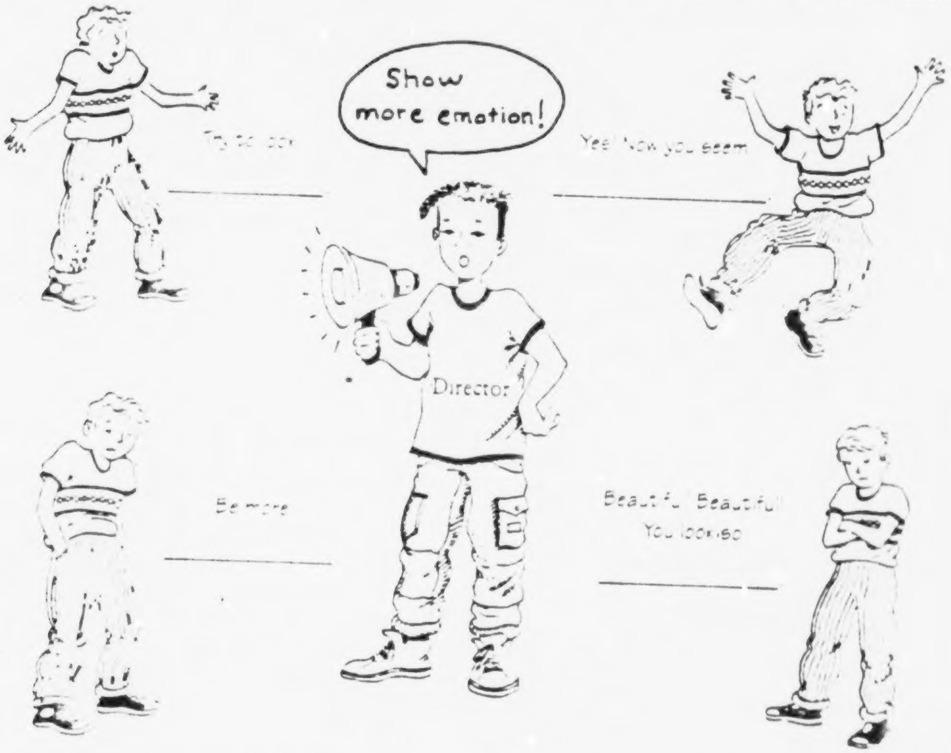
The four Word Watch vocabulary words below describe feelings. The words might be new to you, but the feelings probably aren't! Write the word that tells what each picture shows about the feelings the actor is trying to portray.

despondent: feeling depression or sadness

frustrated: made to feel puzzled or helpless

exhilarated: very, very happy

sullen: showing bad humor or resentment



Try to look ______________

Yes! Now you seem ______________

Be more ______________

Beautiful! Beautiful! You look so ______________

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Stop and Think Strategy

Read the realistic fiction story started below. The hints in the margin will help you use the Stop and Think strategy as you read. Then answer the question at the end of the story.

THE SCHOOL MUSICAL

[illegible]

[illegible]

Carol Matson hung onto the stage curtain while she waited for her turn to audition. Carol was excited to be trying out for the new musical! She had practiced her song over and over again. The girl performing on the stage sounded nervous. Carol took a few deep breaths and glanced at the sheet of music in her hand. If she could only hit that high C without screeching, she'd be fine. She cleared her throat and wished for a cool drink of water.

[illegible]

[illegible]

"Carol Matson!" a voice roared. Carol's knees shook as she stepped onto the wooden stage. The bright lights blinded her. The music stand seemed miles away . . . . .

What is Carol's problem? How did the Stop and Think Strategy help you figure it out?

____

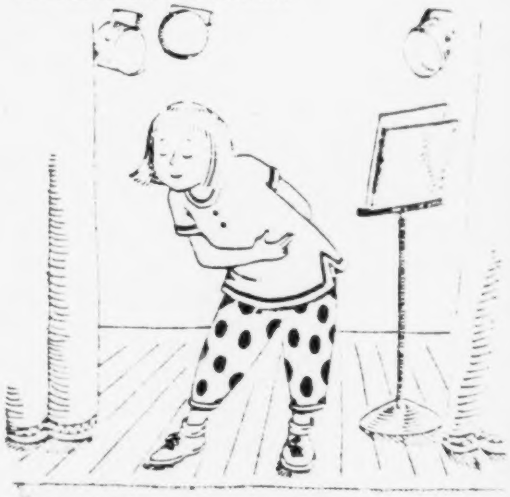
____

____

____

____

____



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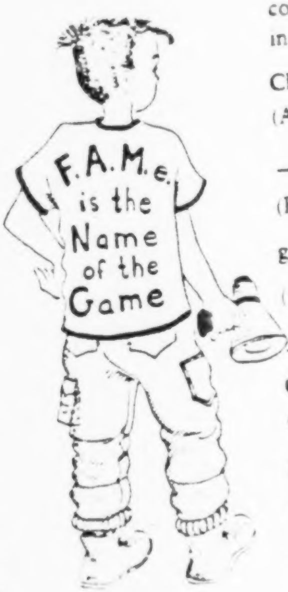
The F.A.M.e. Method ☆ Making Inferences About Characters

Remember Rhoda, the main character from *Pitching In!* Think about Rhoda's FEELINGS, ACTIONS, and MOTIVATIONS as you complete the following sentences. Then use what you've written to infer what Rhoda is like.


F.A.M.e. is the Name of the Game

Chapter 1

(ACTION) Rhoda thinks about her after-school chores and ________

________.

(FEELINGS) When Rhoda remembers the championship softball game, she is ________.

(MOTIVATION) Rhoda slams her math textbook shut because

________.

Chapter 2

(MOTIVATION) On Sunday, when Rhoda comes home carrying her glove, she is ________.

(FEELINGS) When Rhoda says, "But, Mom, you know how much softball means to me," she ________.

(ACTION) Rhoda gives each of the twins a big kiss because

____

Chapter 3

(ACTION) When Mrs. Goshen says she is proud of her, Rhoda

____

____

(MOTIVATION) Rhoda apologizes to her mother because

________.

____

(FEELINGS) At the end, Rhoda's expert pitch to Dylan shows she

________.

____

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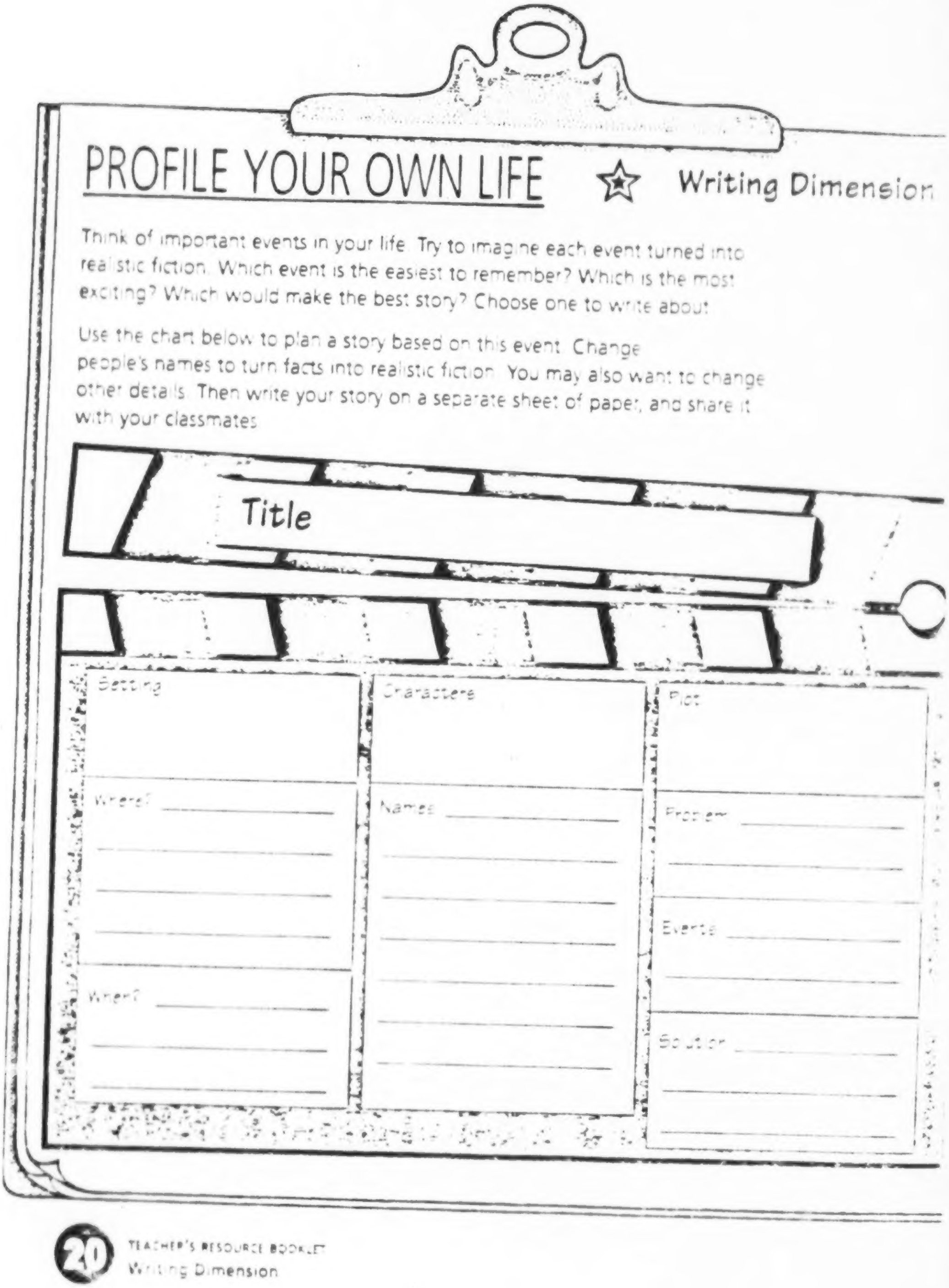

PROFILE YOUR OWN LIFE

☆ Writing Dimension

Think of important events in your life. Try to imagine each event turned into realistic fiction. Which event is the easiest to remember? Which is the most exciting? Which would make the best story? Choose one to write about.

Use the chart below to plan a story based on this event. Change people's names to turn facts into realistic fiction. You may also want to change other details. Then write your story on a separate sheet of paper, and share it with your classmates.

Title

Setting	Characters	Plot
Where? ______	Names ______	Problem ______
When? ______		Events ______
		Solution ______

20 TEACHER'S RESOURCE BOOKLET
Writing Dimension

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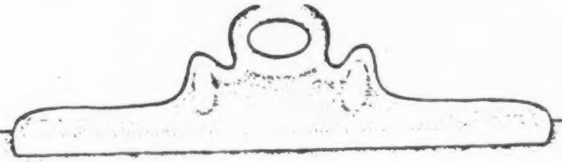

Reading Dimension Detour

Hey, Mom!

You really liked the videodisc *The Role of a Lifetime*, especially Rhoda, the girl in *Pitching In*. You write an advice column for your school newspaper, and you'd like to help Rhoda, maybe even suggest how she could make life easier for herself. Use this sheet to begin drafting your advice to Rhoda.

Dear Rhoda,

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Self-Assessment

The filming is finished and the actors have gone home. Before you put away your own Production Notebook, take a few minutes to examine your performance. Answer each of the following questions by circling "thumbs up" or "thumbs down."

Do I understand the characteristics of realistic fiction? 👍 👎

Do I understand the meanings of the words *frustrated, despondent, sullen,* and *exhilarated?* 👍 👎

Do I know what F.A.M.e. stands for? 👍 👎

Do I know how to use the F.A.M.e. Method to make inferences about characters? 👍 👎

Do I understand when to use the Stop and Think Strategy? 👍 👎

Do I know what to do when I stop and think? 👍 👎

Do I know where to find more realistic fiction books? 👍 👎

Did I enjoy this Channel R.E.A.D. adventure? 👍 👎

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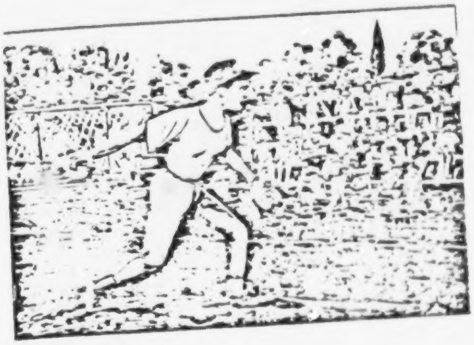
Pitching In

► ENGLISH TEXT



Chapter 1

Rhoda Goshen hefted her book bag onto her shoulder as she turned the key and opened the door to the house. She heaved a sigh as she thought of the chores that awaited her. "Since Mom has started working full-time, she seems to want me as overworked as she is."

For the past week, Rhoda's mom had insisted that Rhoda miss softball practice to baby-sit the twins. Rhoda knew the coach would eventually take her aside and tell her that if she couldn't make practice, she would have to give up softball.

Rhoda glanced at her watch. She had half an hour of quiet before Dwayne and Dylan, her six-year-old twin brothers, came home. Once they arrived, she would have to start dinner and entertain them. Rhoda decided to get her math homework out of the way. She sat down at the kitchen table and opened her math book.

Immediately, her thoughts drifted back to last season. Coralton Junior High's girls' softball team led by one run in the last inning of the championships. The opposing team were taking their last up at bat. The bases were loaded with two outs as their best hitter stepped up to the plate. Rhoda, star pitcher, knew her team was depending on her. She fired two strikes in a row across the plate. Taking a deep breath, Rhoda wound up for the next pitch. Strike three! The game was over, and Rhoda's cheering teammates carried her off the field.

The sound of a chiming clock intruded upon Rhoda's daydreams. With a start, she realized she had only fifteen minutes left to do her homework. To save time, she skipped the directions and started in on the problems. The first question confused her. The second and third were a tangle of numbers and letters on the page. What was wrong? Math had always been her best subject. Frustrated, she slammed the book shut.

Just then the door opened and Dwayne and Dylan burst into the house, racing to be the first to show Rhoda the pictures they'd drawn in school.

"That's nice," Rhoda said as she quickly glanced at the drawings. They were more of the usual knights and castles that fascinated the twins.

"Play 'Knights of the Round Table' with us like you used to," Dylan demanded, brandishing his plastic baseball bat. Dwayne grabbed a chopping board and held it like a shield.

"I can't," said Rhoda. "I have to start dinner before Mom gets home."

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The twins begged Rhoda to let them share her chores, but she refused. "The last time you tried to help me, it took me an extra hour to clean up after you."

"Can we watch you start dinner, then?" Dwayne asked.

Rhoda agreed, then regretted it instantly. The twins' idea of "watching" turned out to be leaping from the counter to the linoleum with loud whoops.

"I can't work like this," she said. "Don't you have something better to do?" Disappointed, the boys went off to destroy their room.

Rhoda was still preparing dinner when Mrs. Goshen flung the door open and collapsed into a chair. "Hi, Rhoda," she said. "What a day. I'm exhausted."

The twins barreled in, and Mrs. Goshen knelt to give them each a hug.

"Mom, Coach Downer said I should keep practicing so I can get a softball scholarship to college someday," Rhoda said. Would her mom understand how important softball practice was?

"That's nice, honey. I'm going to run upstairs and change."

"I thought you'd be a little more excited," Rhoda said, trying to keep the anger from creeping into her voice.

"I am, dear. It's just that sports isn't the only way to get to college. Now, did you finish your homework?"

Rhoda tried to explain about the math, but her mom didn't seem to be listening. Rhoda bit her lip to keep from sobbing. Dylan noticed and said, "Mom, Rhoda's crying."

"It's just these onions I'm peeling," Rhoda explained.

Chapter 2

On Sunday afternoon Rhoda walked into the kitchen, carrying her glove. "See you later, Mom. I'll be home for dinner."

"Rhoda, honey, do you have to play softball now? I have a few errands to run that I didn't have time for during the week. I need you to baby-sit."

"But, Mom, you know how much softball means to me. You're trying to make me give it up completely!"

"Rhoda, I know you've missed a few practices, but . . ."

"Last year I pitched the team to the Championships," said Rhoda, not checking her anger this time. "This year I'll be pitching onion peels down the drain."

"Rhoda . . ."

"I don't see why I should have to miss softball just because of your stupid job!" Rhoda's mom just stared at her, and Rhoda turned away to avoid her mother's eyes.

After school on Monday, Rhoda rushed home, avoiding her friends and any mention of softball practice. She opened the door to the house, stumbling over an array of action figures the twins had left strewn across the floor. With only fifteen minutes before the twins came clamoring home, Rhoda ran upstairs to her bedroom and sat down on the bed.

She saw the hand-mirror on her dresser and picked it up. "Some all-star pitcher," said a despondent Rhoda.

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At that moment she heard a loud crashing noise and hushed whispers. Dwayne and Dylan were back, probably building a moat in the kitchen. Rhoda ran to the kitchen, tripping over Dwayne's book bag, left, as usual, in the doorway. Dylan was standing on an upturned spaghetti pot to reach the phone. Rhoda felt her blood boil as she watched him dial.

"What are you doing?" she demanded.

"Making dinner for you," Dwayne said. "We've saved our allowance and we're ordering pizza!"

"It was going to be a surprise," Dylan added with a pout. All of a sudden, Rhoda felt sorry for the sullen way she'd been acting.

"Wow. You guys really can be a couple of knights in shining armor," Rhoda said as she gave them each a big kiss.

"Eeew!" said the boys. Rhoda smiled as she watched them wipe her kisses off their cheeks. Then she thought about softball practice, and her smile was gone.

Chapter 3

Mrs. Goshen returned, surprised and pleased to find her children happy together. Rhoda told her mother about the pizza.

"So the twins came to your rescue! Well, I'm glad some people in this family had the sense to do something for you for a change."

Then Mrs. Goshen said she needed to speak to Rhoda alone, and the twins charged up to their room.

"I just wanted to tell you how proud you've made me this past week." At the sound of her mother's voice, frustrated tears welled up in Rhoda's eyes.

"What's the matter, sweetheart?" Mrs. Goshen asked.

Rhoda replied, "You can't make me give up softball."

"But you don't have to. I never expected you to baby-sit forever. Starting next week, our neighbor, Mrs. Grunwald, will be keeping an eye on the twins."

"Oh, Mom!" said an exhilarated Rhoda. "I didn't think you understood. I'm sorry I got so angry before."

Just then, a ball came flying across the room, and Rhoda nabbed it with one hand. Then in came Dwayne with Dylan, wearing Rhoda's baseball glove, chasing after him.

"No ball-playing in the house, guys!" she said. "Put that stuff away." She fired the ball to Dylan, and it landed in the glove with a loud *thwack*.

"Wow, Rhoda," said Dylan, looking down in amazement at the ball. "You're some all-star pitcher."

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Appendix G

Houghton Mifflin Videodiscs List

Levels 3-5

LD 241	MYSTERY: The Case of the Missing Mystery Writer Stop and Think Strategy Noting and Evaluating Details Making Inferences
LD 242	FANTASY: The Ordinary Princess Critical Reading/Thinking Strategy Drawing Conclusions Making Predictions
LD 243	NONFICTION: Blue Jeans K-W-L Strategy Summarizing Informational Text Identifying Main Ideas and Supporting Details
LD 244	REALISTIC FICTION: License to Drive Story Map Prediction Strategy Summarizing Stories Identifying Story Elements
LD 245	BIOGRAPHY: And the Winner Is................... Preview and Self-Question Strategy Noting the Sequence of Events Recognizing Cause and Effect Relationships
LD 246	NARRATIVE NONFICTION: Heroes of the Marsh Critical Reading/Thinking Strategy (Nonfiction) Main Ideas, Supporting Details
LD 247	SERIAL FICTION: The Unfinished Trilogy Preview and Predict Cause-Effect Relationships
LD 248	REALISTIC FICTION: The Role of a Lifetime Stop and Think Strategy Making Inferences

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Appendix H

Mystery Test

Name________________
Date________________

Part 1-10 points
What are some characteristics of mysteries?

Part 2- 10 points- Vocabulary
Define each word

1. alibi-

2. suspect-

3. culprit-

4. impostor-

Part 3- 12 points
What are the 4 steps to the stop and think strategy?

1

2

3

4

Part 4- 16 points
What is the difference between a detail or a clue? How will noting and evaluating details help you solve a mystery?

____
____
____
____

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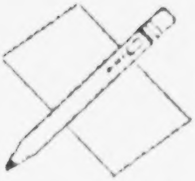

Non fiction Quiz - Channel Read Program

Name ____________________________________

1 WHAT IS NON FICTION LITERATURE? 20 points

2 PUT AN **X** ON ANY TITLES THAT WOULD BE NON-FICTION 10 points

SHAKER INVENTIONS- ____
THE GOLD RUSH- ____
BENJAMIN FRANKLIN- ____
MICKEY MOUSE RETURNS HOME- _
THE REAL MCCOY- ____
MY TEACHER IN AN ALIEN- ____

3 MATCH THE WORDS TO THE CORRECT DEFINITION 10 points

HARDSHIPS	RISKY
HAZARDOUS	MISFORTUNES
INGENUITY	CREATIVITY

4 WHAT DOES THE K W L STRATEGY STAND FOR? 20 points

K - W - L -

5 DEFINE EACH WORD-20 points

TOPIC-
MAIN IDEA-
SUPPORTING DETAILS-

6 READ THE PASSAGE AND ANSWER THE QUESTIONS -20 points

Summer is a wonderful season. There are many fun sports people can play. First people can swim and stay cool in the heat. Second people can go roller blading and get a sun tan. Third people can take long walks along the beaches and smell the fresh air.

What is the topic?
List one main idea
List two support details of your own to support the main idea
____
____

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NAME
SCORE
CHANNEL READ
BIOGRAPHY QUIZ

1 WHAT IS A BIOGRAPHY

2 LIST TWO BIOGRAPHIES YOU ARE INTERESTED IN READING ABOUT
  1
  2

3 DEFINE THE FOLLOWING WORDS

  1 EAGER
  2 ACCOMPLISHED
  3 DETERMINED

4 DESCRIBE THE PREVIEW AND SELF QUESTION STRATEGY

5 WHICH SHOW CAUSE AND EFFECT - A OR B
    A THE TORNADO WAS SO STRONG THAT IT BLEW DOWN SEVERAL BUILDINGS
    B THE SUN WAS VERY BRIGHT YESTERDAY

6 WHAT IS THE CAUSE

7 WHAT IS THE EFFECT

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Realistic Fiction Test

True or False

1. ___ Realistic fiction is a true story based on someone's life.
2. ___ In realistic fiction, the characters, setting, and events are based on real incidents or on made-up events that seem real.
3. ___ Cartoon characters would be great for a realistic fiction story.
4. ___ Understanding the character's personality is important for a realistic fiction story.
5. ___ It does not matter if a character displays his actions of his feelings.

Vocabulary- Match

despondent
exhilarated
sullen
frustrated

very happy
depressed
feel puzzled
bad humor

Use any one of your vocabulary words in a sentence.

What are the 4 stop and think strategies?
1.
2.
3.
4.

What does it mean to make an inference about a character?

What does the F.A.M. e method stand for
F -
A -
M -

Read and answer the following questions.
Santa Clause was crying very hard on Christmas Eve because someone stole all the little childrens' presents.
Feeling-
Action-
Motivation-
What kind of person is Santa Clause?

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